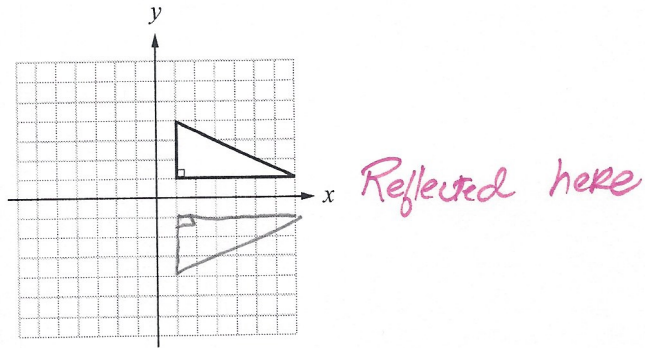# Grade 9 Achievement Test

Mathematics

2000

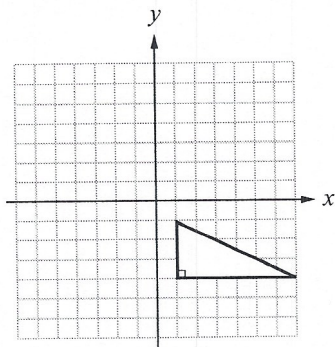Alberta LEARNING

Connections within Mathematics

Use the following information to answer question 1.

A right-angled triangle is shown below.
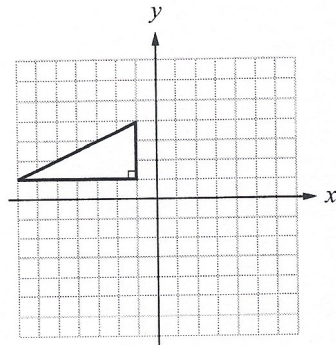

Reflected here

1. Which of the following diagrams represents the triangle above when it is reflected using the *x*-axis as the line of reflection?

A.

B.
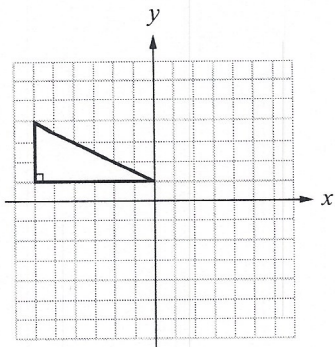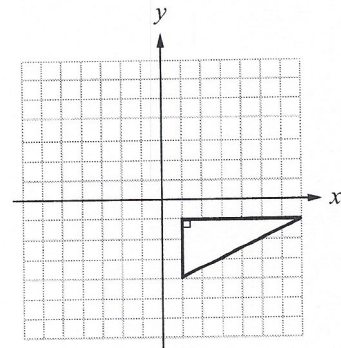

C.

D.

Use the following algebra-tile legend to answer questions 2 and 3.

Shaded is positive

Unshaded is negative

$\blacksquare = 1$ $= x$ $= x^2$
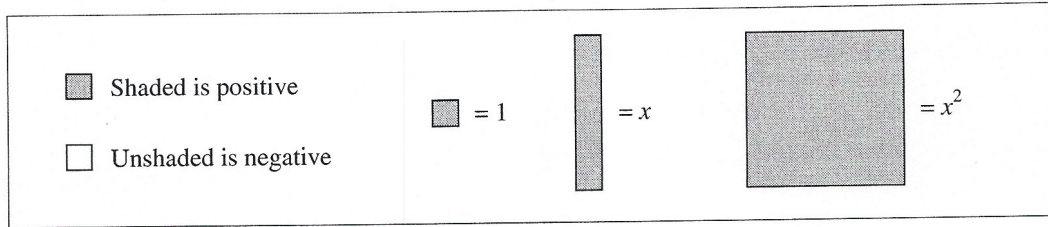
2. Which of the following area diagrams represents the product of $(x + 3)(x - 4)$?

A.

B.

C.

X

D.

x^2 $-x$ $-x$ $-x$ $-x$

X
X
X

-4
-4
-4

$x + 3 = $

$x - 4 = $ ▢ ▢ ▢ ▢
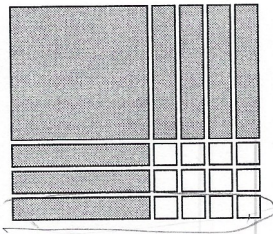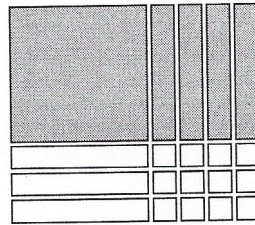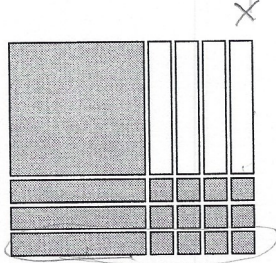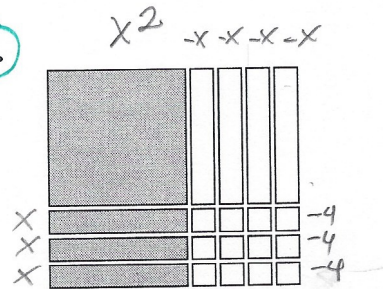
$(x + 3)(x - 4)$ $x^2 - 4x + 3x - 12$

$x^2 - x - 12$

2

3. Kent and Larissa go to a movie. Admission is x dollars per person. They have a $5 discount coupon. Which of the following algebra-tile models represents a mathematical expression for what they pay?

A.

B.

C.

D.

(KenT + LaRissa) − 5

↓   ↓

x x
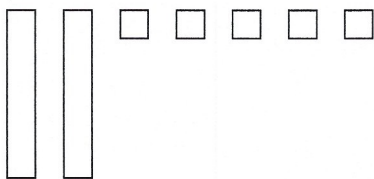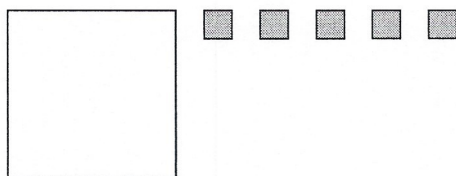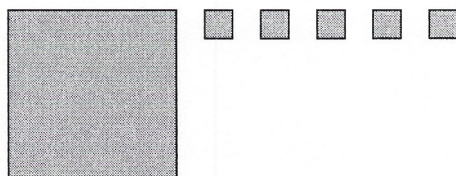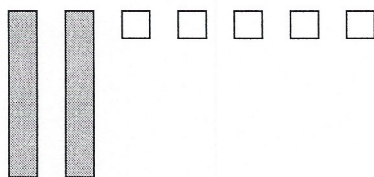
On the grid below, the original image is $\triangle ABC$ and the dilatation image is $\triangle A'B'C'$.
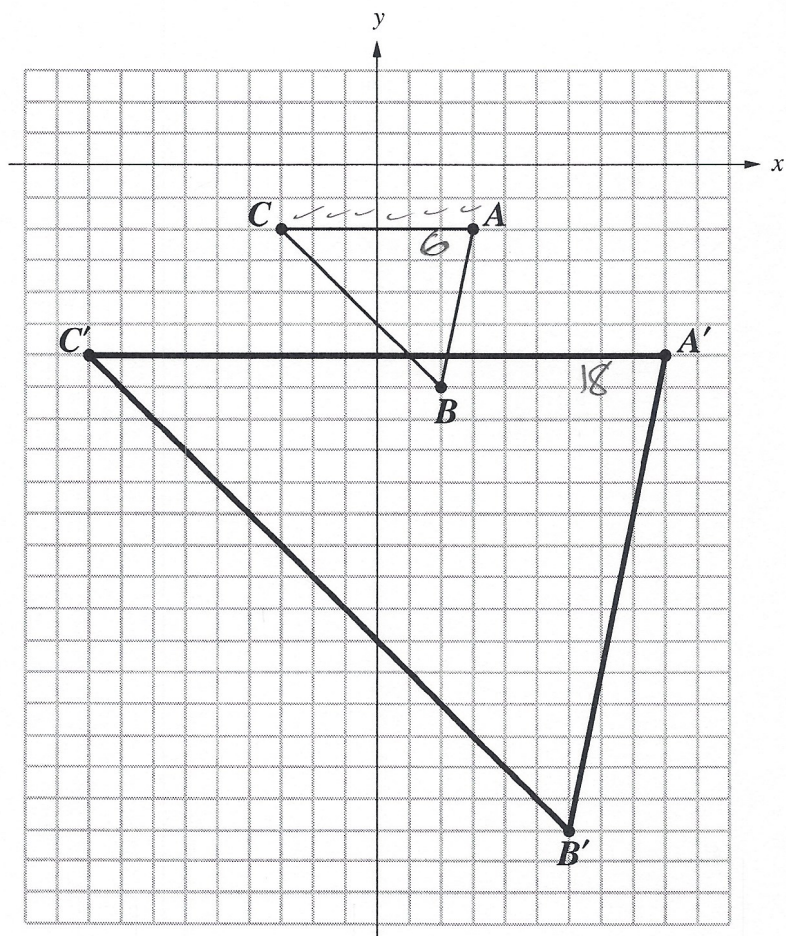
4. The scale factor of the dilatation is

   A. $\dfrac{1}{4}$

   B. $\dfrac{1}{3}$

   C. 3

   D. 4

Enlargement → S.F > 1

$S.F = \dfrac{New}{Old} = \dfrac{18}{6} = 3$

Again, a bit more advanced

A home builder is installing carpet in a new home. The area, in square metres, of the living room can be expressed as $x^2 - 8x + 15$.

$$A = (x^2 - 8x + 15) \text{ m}^2$$

$(x - 3)$ m

5. If the length of this room is represented by $(x - 3)$ m, then the width is represented by

A. $(x - 5)$ m
B. $(x + 5)$ m
C. $(7x - 5)$ m
D. $(-7x + 5)$ m

$(x-3)(x-5) = x^2 - 5x + 3x + 15$
$x^2 - 8x + 15$

$x^2 - 8x + 15$

6. Which of the following number lines represents the solution to the inequality $x + 8 > 3x - 6$, $x \in R$?

A.

B.

C.

D.
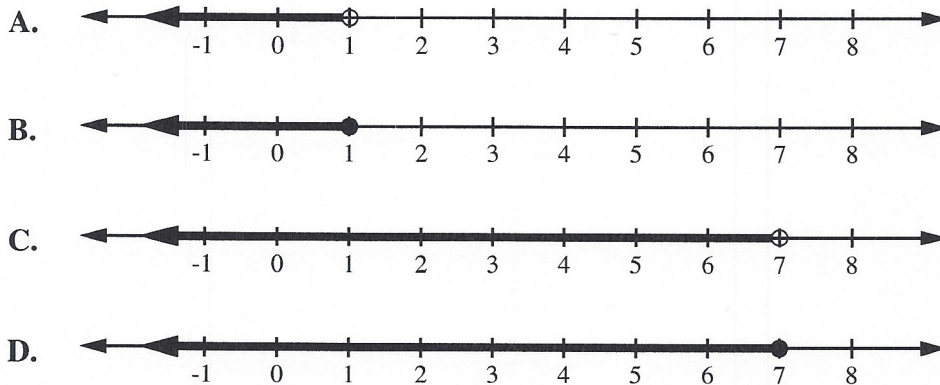
$x + 8 > 3x - 6$
$-x + 6 \quad\quad -x + 6$

$8 + 6 > 3x - x$
$14 > 2x$

$\dfrac{14}{2} > x$

$x < 7$

7. The calculator keystroke sequence that would give the solution of $\dfrac{28+7}{5 \times (4+3)}$ is

A. 28 [+] 7 [÷] 5 [×] 4 [+] 3 [=]

B. [(] 28 [+] 7 [)] [÷] 5 [×] [(] 4 [+] 3 [)] [=]

C. 28 [+] 7 [÷] [(] 5 [×] [(] 4 [+] 3 [)] [)] [=]

D. [(] 28 [+] 7 [)] [÷] [(] 5 [×] [(] 4 [+] 3 [)] [)] [=]

8. If $2x + 23 = -7 + 8x$, then x equals

A. 5
B. 3
C. -3
D. -5

(handwritten): CORRECT

$$2x + 23 = -7 + 8x$$
$$-2x$$
$$23 + 7 = 8x - 2x$$
$$30 = 6x$$
$$x = \frac{30}{6} = 5$$

9. A square has an area of 196 cm². Given that $\pi = 3.14$, what is the area of the largest circle that can be drawn within this square?

A. 615.44 cm²
B. 153.86 cm²
C. 62.42 cm²
D. 43.96 cm²

(handwritten):

196 = area

196 $l = \sqrt{196} = 14$

SO

d = 14 cm
r = 7 cm

$$\text{area of circle} = \pi r^2 = \pi (7)^2$$
$$= 49\pi = 49 \times (3.14)$$
$$= 153.86 \text{ cm}^2$$

6

10. You are asked to conduct a survey to determine the favourite sport of people attending a co-ed camp. Which of the following samples is **least** biased?

   A. A sample of all campers
   B. A sample of all of the boys at camp *Biased (what about girls?)*
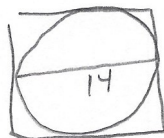   C. A sample of the camp football team *Biased → football!*
   D. A sample of spectators at a camp soccer game → *Biased for soccer*

Use the following information to answer question 11.

A square-based pyramid in northern Egypt has a base width of 31 m and a face height of 21 m.
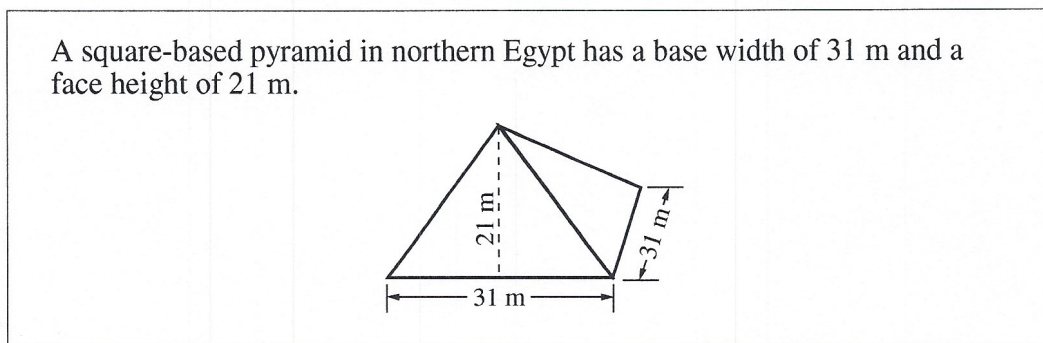
11. The total surface area of the 4 exposed faces of this pyramid is

   A. 2 604.0 m^2
   B. 1 302.0 m^2
   C. 651.0 m^2
   D. 325.5 m^2

   Area of each triangular face $= \left(\dfrac{31\,m \times 21\,m}{2}\right)$

   $= \dfrac{651}{2}\ m^2 = 325.5\ m^2$

   Total Area $= (325.5\ m^2) \cdot 4 \to 1302\ m^2$

12. Alex runs on a treadmill and consumes about 5×10^5 joules (J) of energy every 15 minutes. At this rate of energy consumption, if Alex runs for $1\frac{3}{4}$ hours, the amount of energy he uses, expressed in **scientific notation**, is approximately

   A. 3.5×10^6 J
   B. 35×10^5 J
   C. 8.75×10^5 J
   D. 87.5×10^4 J

7

13. During badminton intramurals, 5 players compete in round robin play where each player plays every other player one game. No tiebreaker games are required. The two players who win the most games meet in a final playoff game. Including the final game, how many games must be scheduled?

A. 26 games
B. 21 games
C. 11 games
D. 6 games

Handwritten work:

1 → 2 3 4 5

2 → 3 4 5

3 → 4 5

4 → 5

→ 10 games
+ 1 playoff
_____
11 games
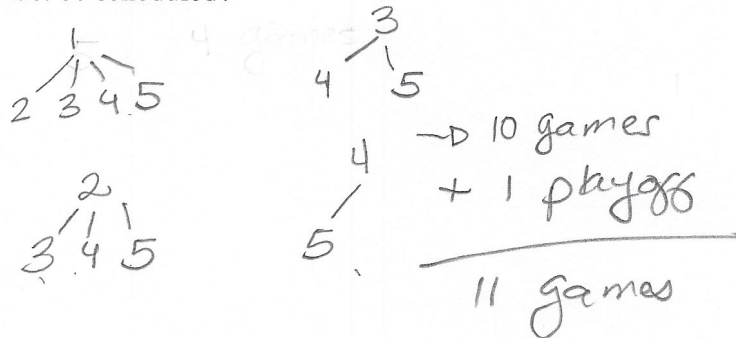
14. What is the value of $\dfrac{(-2)^7}{4^0}$?

A. +128
B. −128
C. 0
D. Undefined

Handwritten work:

$(-2)^7 = -128$

$4^0 = 1$

so $\dfrac{-128}{1} = -128$

8

Practice Time versus Golf Scores
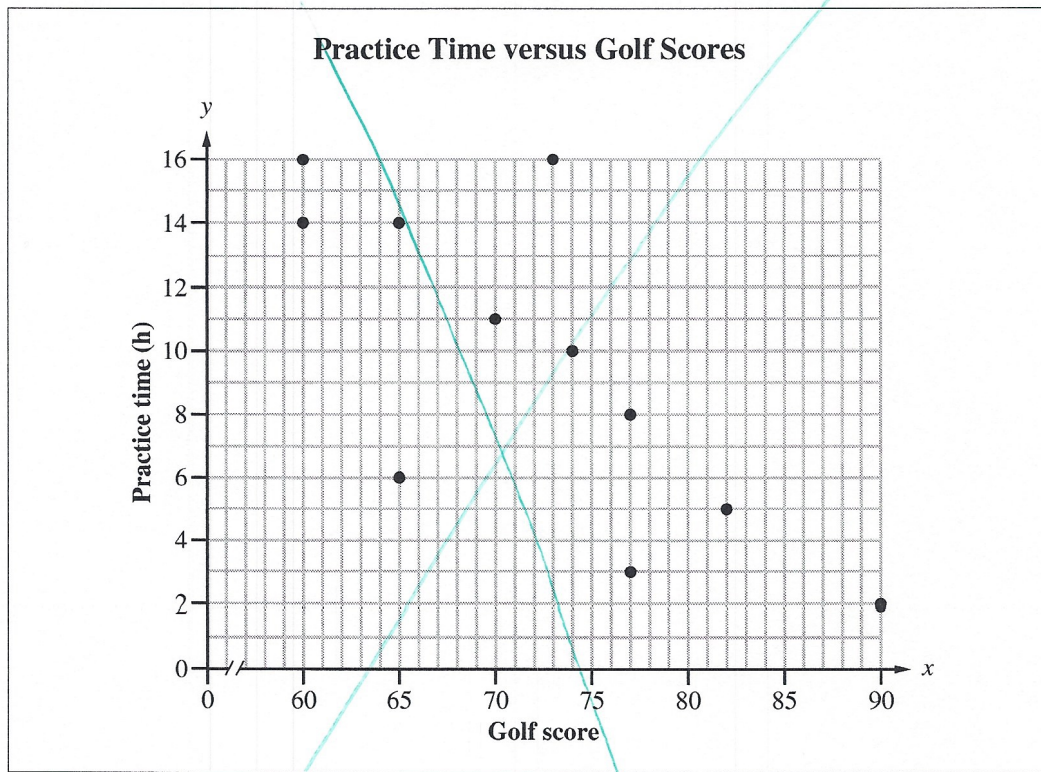
15. If a line of best fit were drawn on the scatter plot above, the coordinate point that would lie closest to the line of best fit would be

A. (60, 14)

B. (65, 6)

C. (73, 16)

D. (77, 8)

Mathematics of Farming

Farmers use math everyday. The following questions show ways in which farmers may use math in their daily work.

16. A farmer and his son leave a barn at the same time and walk in opposite directions checking a fence line. The son walks at a speed of 3.5 km/h, and the farmer at 4.0 km/h. How much time will have elapsed when the farmer and his son are 2.5 km apart?

    A. $\frac{1}{5}$ h

    B. $\frac{1}{3}$ h

    C. 3 h

    D. 5 h

    "answers"

    4.0 km/h ← Farmer ∘ 3.5 km/h → son

    distance $X = \frac{4.0 \ (answer)}{1 \ hr}$ distance $x = \frac{3.5 \ (answer)}{1 \ hr}$

    $\frac{1}{3}h$ →   1.33 km + 1.16 km → 2.5 km apart
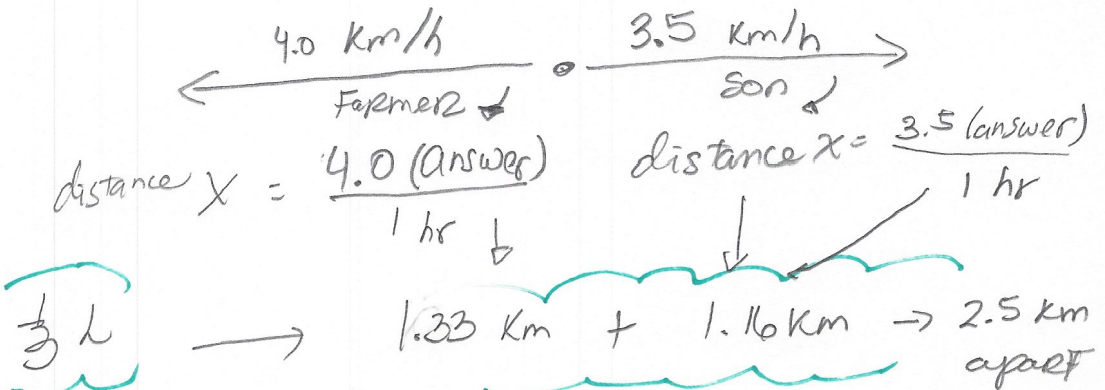
17. On Monday, the farmer's hens laid 50 eggs. Of the 50 eggs, 35 were white, and 15 were brown. When the farmer gathered the eggs, what is the probability that the first egg he randomly picked was a white egg?

    A. $\frac{1}{50}$

    B. $\frac{1}{35}$

    C. $\frac{15}{35}$

    D. $\frac{35}{50}$

    white eggs $\frac{35}{50}$

The farmer's son makes a work arrangement with his father. In return for unlimited use of a truck for one year, he agrees to pay the following estimated yearly truck expenses.

- Insurance $556.40
- Gasoline $1 040.40
- Repairs $800.00
- Maintenance $200.00

2596.8 expenses

The son also wishes to earn $2 000.00 above these truck expenses.

---

18. The son works 8 hours a week for 52 weeks on the farm. What is the **lowest** hourly wage he must earn in order to pay these truck expenses for one year and also save $2 000.00?

    A. $6.25/h
    B. $10.50/h
    C. $11.05/h
    D. $12.50/h

2596.8 + 2000 = $4596.8 in a year

52 w × 8 hours = 416 hours

$$\frac{\$4596.8}{416 \text{ hours}} = \$11.05 \text{ per hour}$$

A conveyor belt is used to move hay bales from the ground to the top of a haystack. The loading end of the conveyor belt is 7.3 m from the haystack. Each hay bale moves 8.0 m along the conveyor belt.
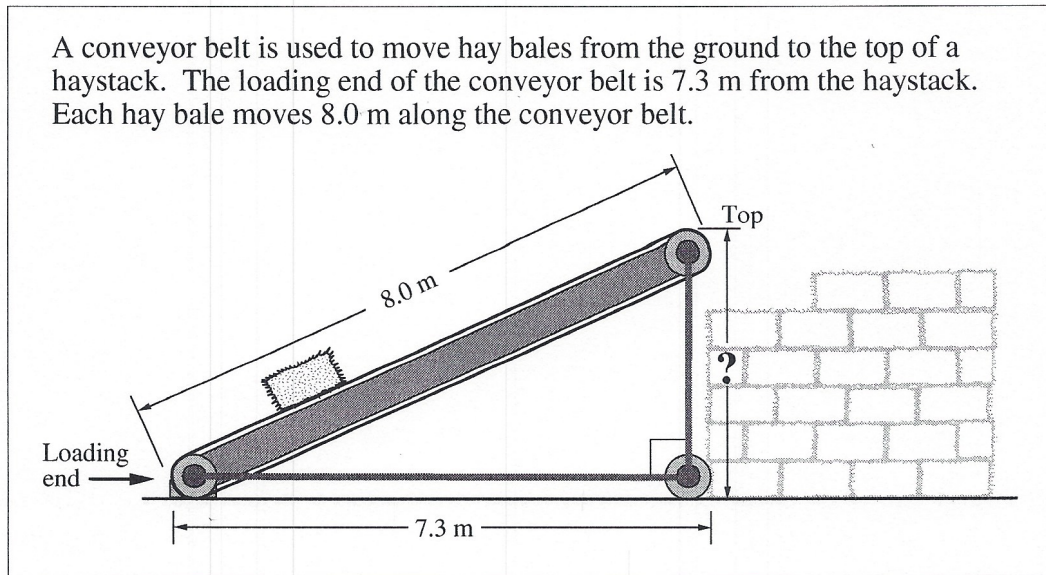
19. What is the height to the top of the conveyor belt?

- **A.** 2.6 m
- **B.** 3.3 m
- **C.** 6.8 m
- **D.** 10.7 m
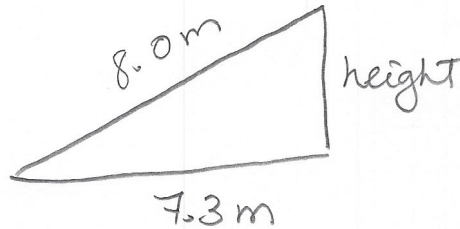
$$height = \sqrt{(8)^2 - (7.3)^2}$$

$$= \sqrt{64 - 53.29} = \sqrt{10.71}$$

$$= 3.27 \, m \approx$$

3.3 m

Grain auger

Grain

Grain auger
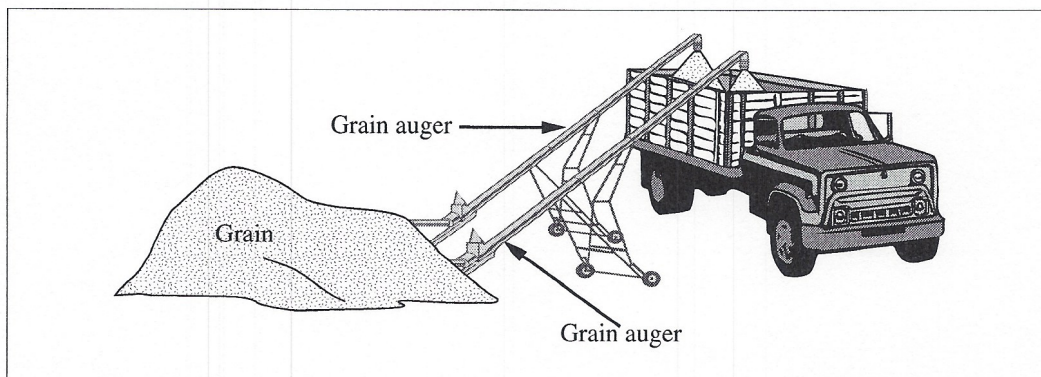
20. At the farm, two augers are being used to fill a truck with grain. One auger alone can fill the truck in 15 minutes. The other auger alone can fill the truck in 10 minutes. How long will it take the two augers together to fill the truck?

half

A. 5.5 min
B. 6.0 min
C. 12.5 min
D. 25.0 min

15 minutes → 7.5 minutes
10 minutes → 5 minutes

5 min ___5.5 | 6.0 | 6.5 6.5 7___ 7.5 min

from here, we know that the time is between 5 min and 7.5 min

21. In the fall, the farmer sells his grain. Which of the following graphs shows the relationship between grain price and farm income?

A.

Farm income ($) vs Grain price ($)

B.

Farm income ($) vs Grain price ($)

C.

Farm income ($) vs Grain price ($)

D.

Farm income ($) vs Grain price ($)
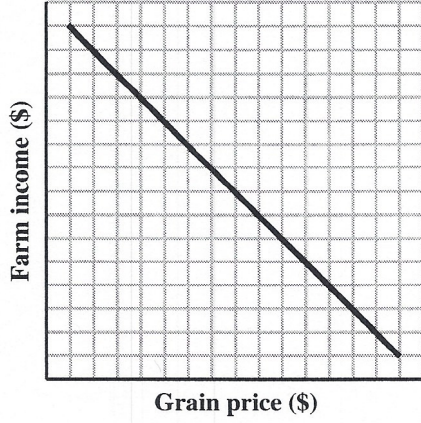
↳ the higher the price, the higher the "income"

22. A surveyor's report states that a field being planted measures 302 m by 604 m. A farmer spreads seed at a rate of 2.7 kg for every 100 m². Given that 1 t = 1 000 kg, approximately how many tonnes (t) of seed are needed to plant the entire field?

A. 5 t
B. 25 t
C. 65 t
D. 651 t
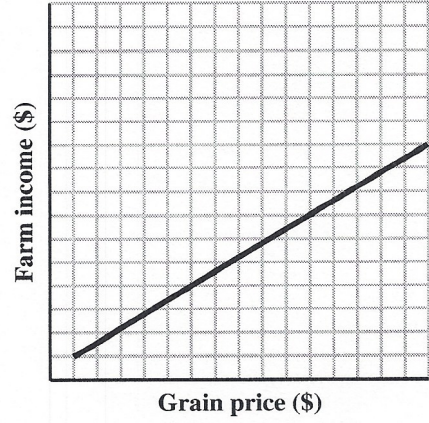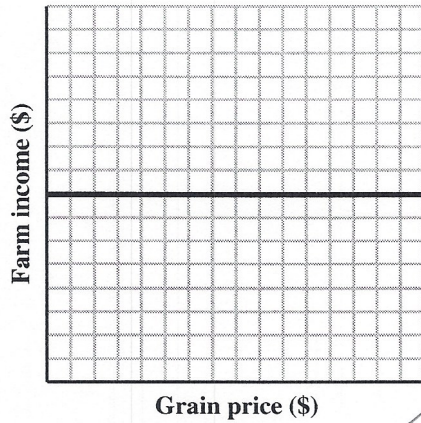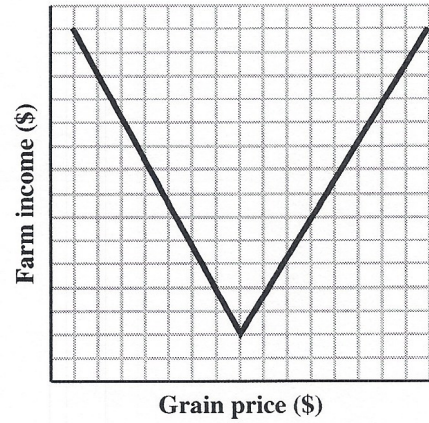
Handwritten work:
604
302
A = 182,408 m²

$$A = \frac{182,408 \text{ m}^2}{100 \text{ m}^2} \rightarrow 2.7 \text{ kg}$$

= 1824.08 × (2.7 kg)
4925.01 kg spread
→ 4.9 tons ≈ 5 tons

Use the following information to answer question 23.

A farmer hires a worker. Each week, the worker works 9 h at a rate of $5.60/h. From each weekly paycheque, the worker must pay

- 1% of the total pay for disability insurance
- 2.2% of the total pay for employment insurance
- 15% of the total pay for income tax and Canada Pension

23. What are the worker's weekly earnings after these deductions are made?

A. $50.40
B. $41.48
C. $41.23
D. $32.20

Handwritten work:
Week:
9 h × $5.60/h = $50.4 weekly
50.4 × (0.01) = $0.504
50.4 × (0.022) = $1.1088
50.4 × (0.15) = $7.56
$9.1728 off the check

$50.4 − $9.1728 ≈ $41.2272

≈ $41.23

15

The farmer builds a ramp to load cattle into a truck. The truck deck is 1 m above the ground, and the base of the ramp is 5.65 m long.
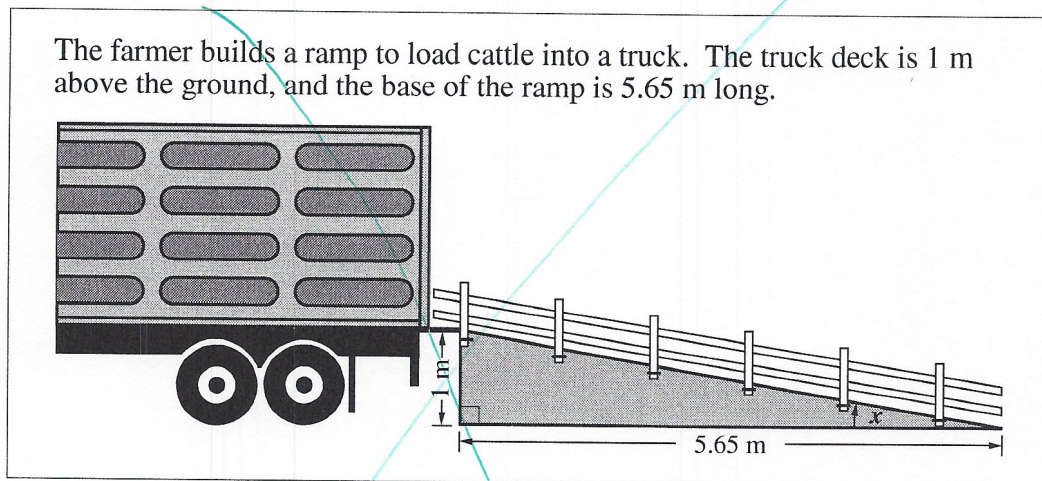
24.   What is the angle of inclination (x) of the ramp?

    A.   10.0°
    B.   17.0°
    C.   27.0°
    D.   45.0°

Mathematics at the Cabin
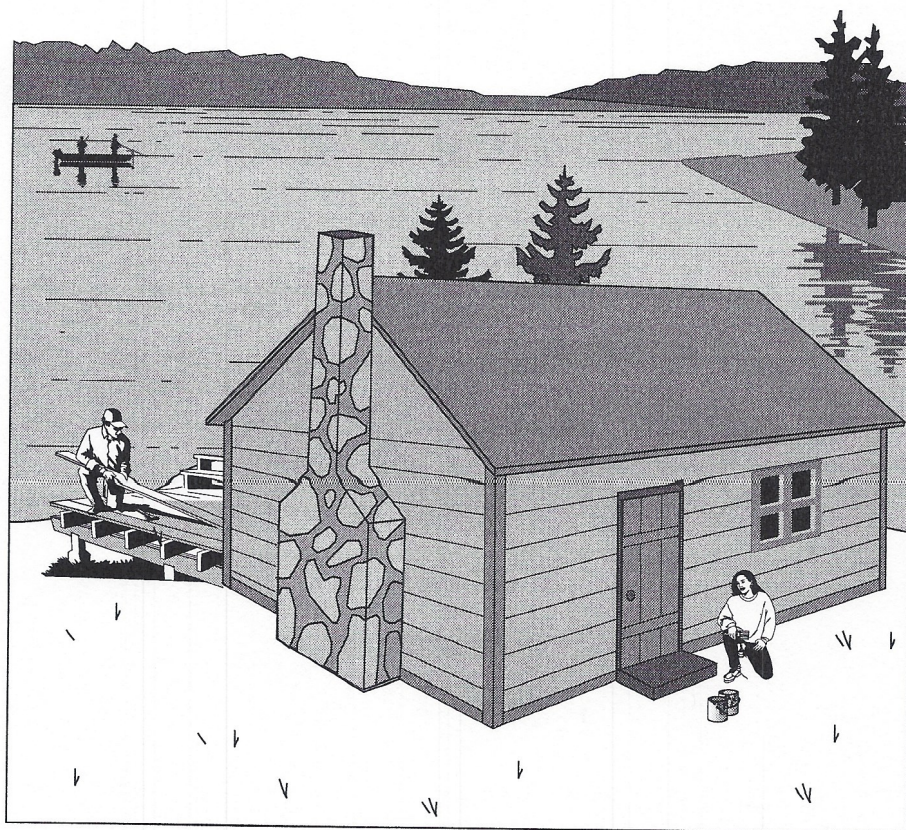
Michael and Marie are completing work on their cabin at the lake.

Use the following information to answer question 25.

Michael stacks boxes of building materials in his storage shed.
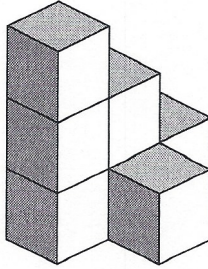
25.   Which of the following sets of views represents the layout of Michael's boxes?

A.
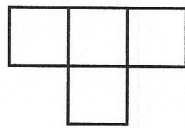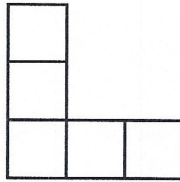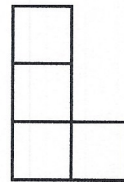
Plan or Top view   Front view   Side view

B.
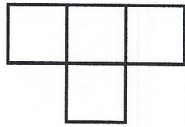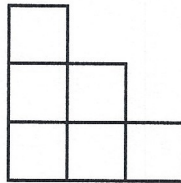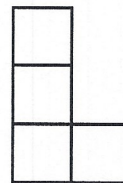
Plan or Top view   Front view   Side view

C.
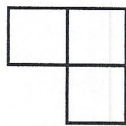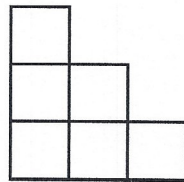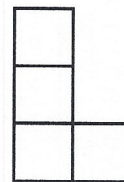
Plan or Top view   Front view   Side view

D.
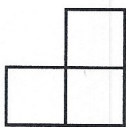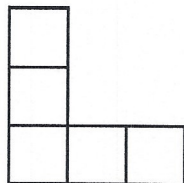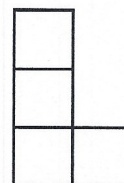
Plan or Top view   Front view   Side view

26. Michael is 1.7 m tall. At 2:00 P.M., he casts a shadow 90 cm long and the cabin casts a shadow 305 cm long. The height of the cabin, to the nearest tenth of a metre, is

A. 0.5 m
B. 2.0 m
C. 4.7 m
D. 5.8 m

(handwritten work:)

2:00 pm

1.7 m / 170 cm

90 cm

2:00

x
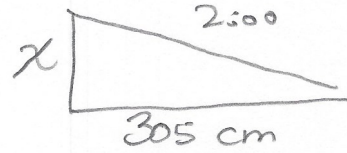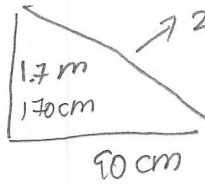
305 cm

$\frac{170 \text{ cm}}{90 \text{ cm}} = \frac{h}{305 \text{ cm}}$

$h = \frac{(170)(305 \text{ cm})}{90}$

$h = 576.11 \text{ cm}$

$h = 5.76 \text{ m}$

27. Michael buys a fan for the cabin. The store purchased the fan for $60. The store then marked up the price by 20%. When the fan went on sale, it was decreased by 20%. What was the sale price of the fan that Michael bought?

A. $57.60
B. $60.00
C. $60.20
D. $72.00

(handwritten work:)

$60 × (0.20) = 12

60 + 12 = $72 (store price)

$72 × (0.20) = 14.4 (discount)

72 − 14.4 = $57.6

28. Michael and Marie select wood to build a fence around their cabin property. Out of every 10 pieces of wood they look at, 7 of them are of a good quality and 3 of them have a defect. If Michael and Marie each select 1 piece of wood from a different pile, what is the probability that they both select a good-quality piece?

A. $\frac{6}{100}$

B. $\frac{9}{100}$

C. $\frac{14}{100}$

D. $\frac{49}{100}$

(handwritten work:)

7 good

3 → defect

Michael   Marie

$\frac{7}{10} \cdot \frac{7}{10} = \frac{49}{100}$

19

29. Michael has a cylindrical rainwater barrel that needs a lid. Which of the following equations could Michael use to determine the radius of the lid?

A. $r = \dfrac{2C}{\pi}$

B. $r = \dfrac{C}{2\pi}$

C. $r = \dfrac{\pi}{2C}$

D. $r = \dfrac{2\pi}{C}$

Use the following information to answer question 30.

Marie made an arrangement to buy a used television for a total cost of $200. She made a $50 down payment and arranged to make 6 equal payments to pay the balance.

Down payment
$50

6 Equal payments

x x x x x x

$200
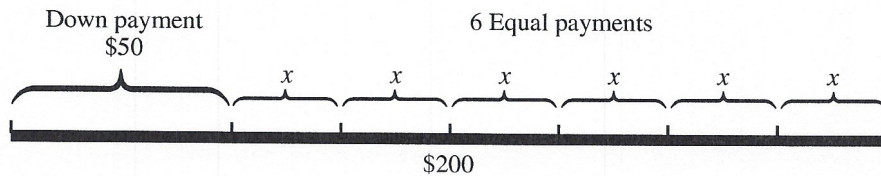
30. Which of the following formulas can Marie use to determine the amount of each of the 6 equal payments?

A. $x = 200 \div 6 + 50$

B. $x = (200 + 50) \div 6$

C. $x = 200 \div 6 - 50$

D. $x = (200 - 50) \div 6$

$200 - 50 = \$150$ in 6 months

$x = \dfrac{150}{6} \rightarrow (200 - 50)$

20

31. Marie wants to build a rectangular flower bed. If Marie's flower bed has the greatest possible area within a perimeter of 24 m, then the length of the longest side of her flower bed will be

A. 6 m

B. 7 m

C. 10 m

D. 11 m
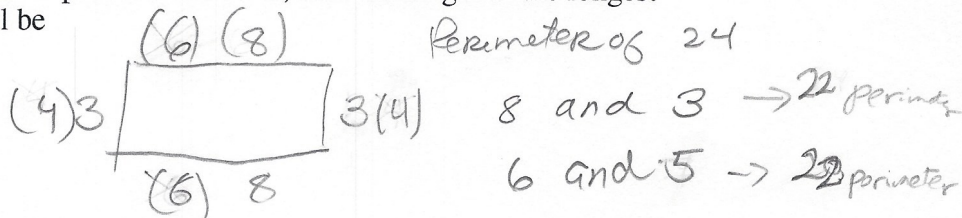
Use the following information to answer question 32.

Marie is concerned about the cost of energy consumption at the cabin. Using her neighbour's power bills for the past two years, Marie graphed the energy consumption of the neighbour's cabin, as shown below.

Energy Consumption
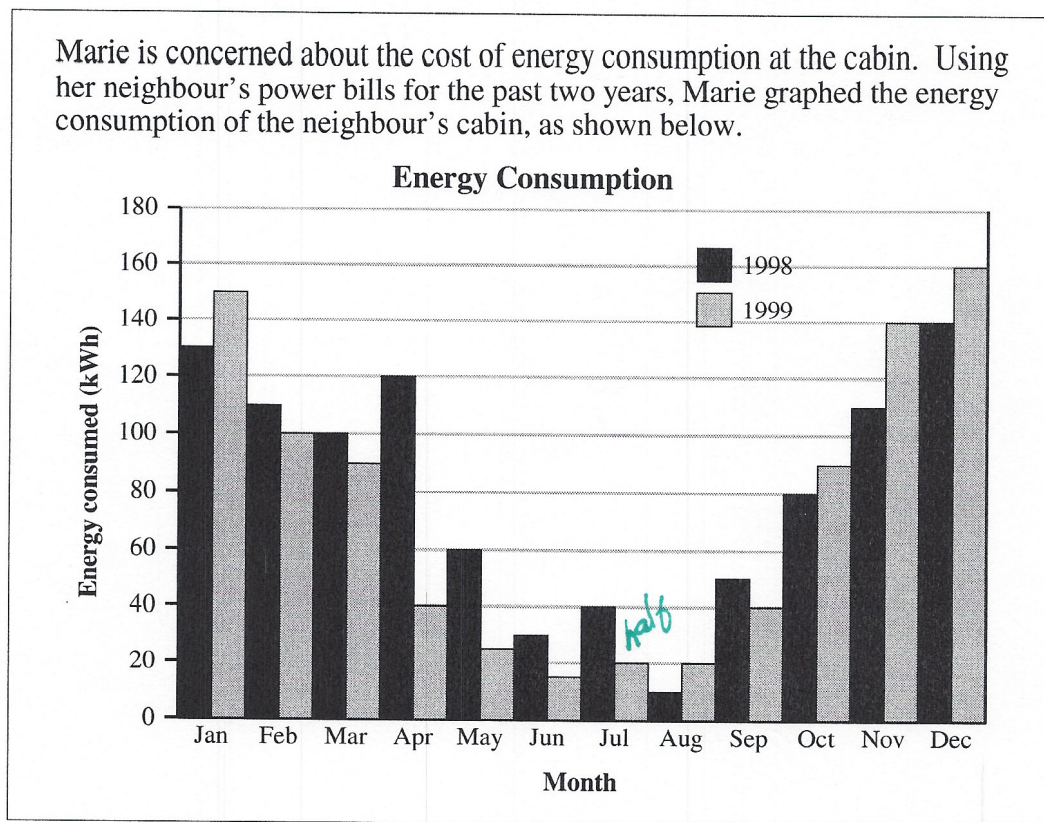
32. When Marie compares the energy consumption for the two years, she realizes that the

A. July 1999 consumption was one-half the July 1998 consumption

B. August 1999 consumption was one-half the August 1998 consumption

C. April 1999 consumption was three times as great as the April 1998 consumption

D. February 1999 consumption was the same as the February 1998 consumption

Summer Vacation

Summer vacation has finally arrived! Grade 9 final exams have been completed, and a great summer awaits you. You belong to a travel club, and you are on the way to the airport to fly to London, England, for a one-week holiday.

The questions in this section fall under the sub-headings

- at the airport before departure
- takeoff, flight, and landing
- on tour in London

33. To enter the boarding area, each person walks through a metal detector. If 1 person out of every 10 people sets off the detector, what is the probability that 2 people selected at random will both set off the detector?

A. $\frac{1}{10}$

B. $\frac{2}{10}$

C. $\frac{1}{100}$

D. $\frac{81}{100}$

Handwritten work:

1 out of 10

$\frac{1}{10} \cdot \frac{1}{10} = \frac{1 \times 1}{10 \times 10} = \frac{1}{100}$

→ 2nd person

↙ 1 person

Remember that when dealing with independent events, you multiply the probabilities,

Use the following information to answer question 34.

In the boarding area, a vending machine attendant is servicing the machines. In one of the machines, the attendant finds that the dollar coins, quarters, and dimes have a total value of $67.40. There are 50 more dollar coins than quarters and twice as many dimes as quarters.

34. What is the total value of the dimes the attendant collected?

A. $1.20

B. $2.40

C. $12.00

D. $24.00

Handwritten work:

(1)d + (0.25)q + (0.10)d

d = 50 + q

q

di = 2q

If $1.20 in dimes, then 12 dimes → 6 q → 56 dollars

12 (0.10) + 6 (0.25) + 56(0.25)

1.20 + 1.5 + 56 = 58.7

If $2.40 in dimes then

24 dimes → 12 q → 62 q

24 (0.10) + 12 (0.25) + 62

2.40 + 3 + 62 = 67.4

23

35. While looking out the windows in the boarding area, you notice a cargo plane being loaded. The total volume of storage space available on the cargo plane is 1.488×10^3 m^3. How many crates with a volume of 1.24×10^1 m^3 can fit in this storage space?

A. 1.20×10^4 crates
B. 1.20×10^3 crates
C. 1.20×10^2 crates
D. 1.20×10^1 crates

Use the following information to answer question 36.

Your plane requires 20 L of fuel for each kilometre travelled after it reaches cruising altitude.

To determine the total amount of fuel required for a flight (F), the pilot also needs to know:

- the amount of fuel needed to reach cruising altitude (A)
- the distance, in kilometres, travelled after the plane reaches cruising altitude (C)
- the amount of fuel needed for descent and landing (D)

36. Which of the following formulas represents the total amount of fuel required for the flight?

A. $F = C + A + 20F$

B. $F = C + D + 20A$

C. $F = A + C + 20D$

D. $F = A + D + 20C$

[handwritten: A → $\dfrac{20 L \times C}{}$ → D]

[handwritten: A + 20c + D → Total amount]

After takeoff, your plane ascends along its flight path at an angle of 20°.
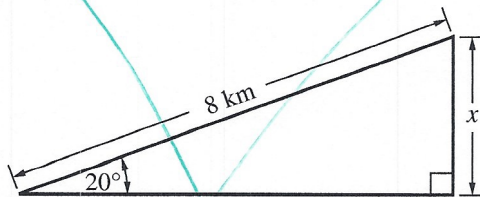
37. A formula that can be used to find the plane's vertical height (x), in kilometres, above ground level after it has travelled 8 km along its flight path is

A. $\sin 20° = \dfrac{x}{8}$

B. $\sin 20° = \dfrac{8}{x}$

C. $\cos 20° = \dfrac{x}{8}$

D. $\cos 20° = \dfrac{8}{x}$

During the flight to London, you try to solve two puzzles from your Logic Puzzle Magazine.

Use the following puzzle to answer question 38.

Integer Insanity!
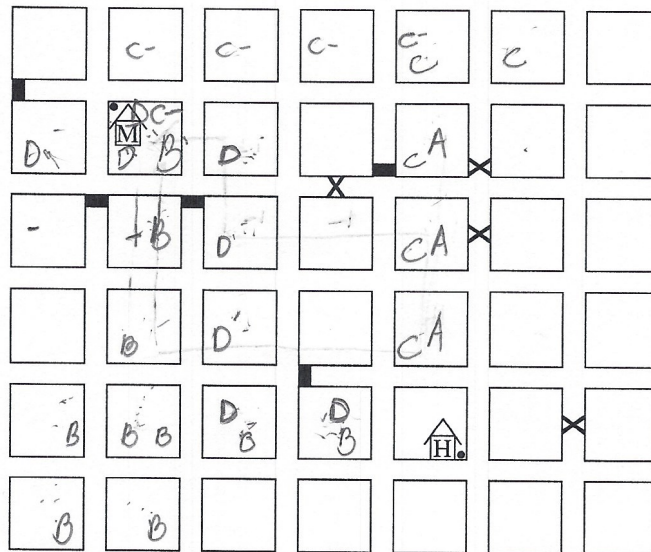
Legend

X   Road block

■   Dead end

H   Hotel

M   Museum
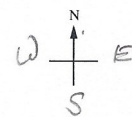
To solve this puzzle, let

- positive integers represent movements north or east
- negative integers represent movements south or west
- 1 block = 1 integer value

38.   In the first puzzle, which of the following sets of integers represents the shortest route, in blocks, from the hotel to the museum?

A.   +2, +1, +2, –5   10 blocks

B.   –5, +3, +1, +1   10 blocks

C.   +1, +1, +3, –5   10 blocks

D.   –2, +3, –2, +1   8

27

39. In the second puzzle, you have 3 consecutive odd numbers whose sum is 219. What is the value of the largest number?

A. 77

B. 75

C. 73

D. 71

Handwritten:
A. 73 + 75 + 77 = 225
B. 71 + 73 + 75 = 219. *(circled)*
C. 69 + 71 + 73 = 213
D. 67 + 69 + 71 = 207

Use the following information to answer question 40.

Your flight lands at Heathrow Airport in London. A sample of planes arriving at Heathrow Airport between 12:00 P.M. and 10:00 P.M. on a particular day and the number of passengers on each are plotted on the scatter plot below.

Flight Arrivals at Heathrow Airport
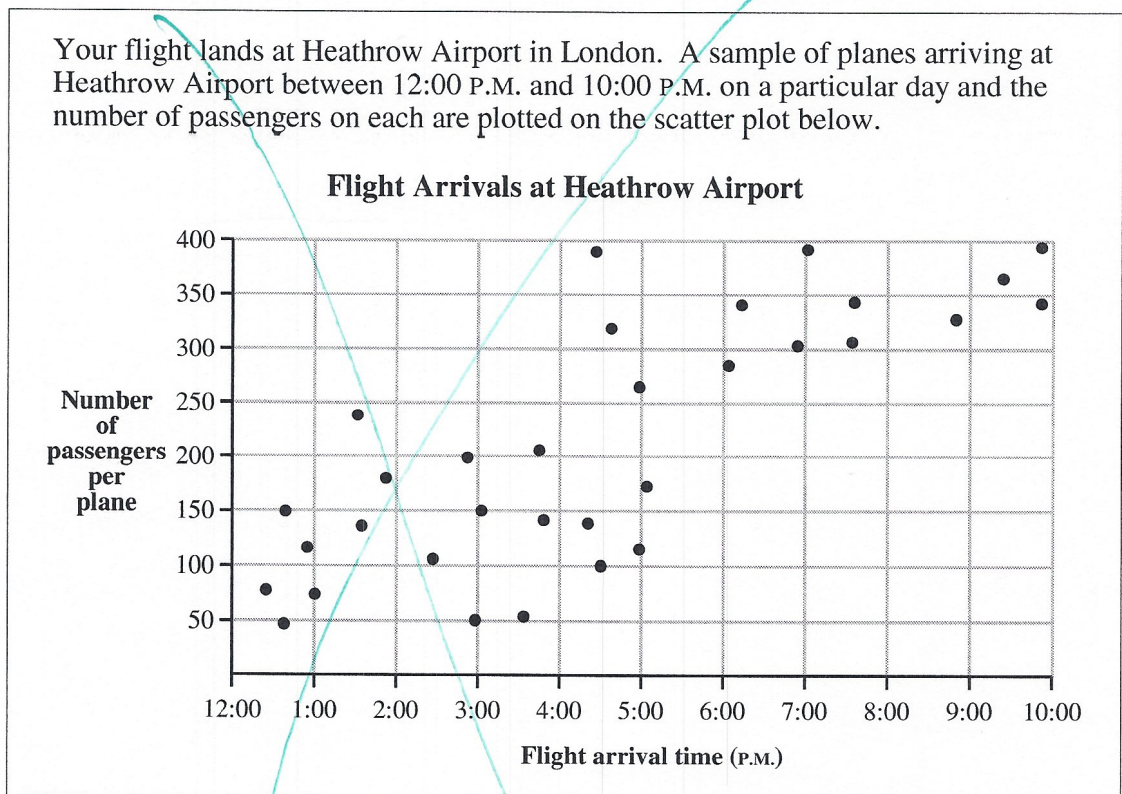
40. The scatter plot shows that in the

A. afternoon fewer planes land than in the evening

B. evening there are more passengers per plane than in the afternoon *(circled)*

C. evening more planes land than in the afternoon

D. afternoon there are more passengers per plane than in the evening

28

On Tour in London

41. While on a tour, you see a rectangular dock on the River Thames. The area of the surface of the dock can be represented by $24y^2$ square units. The length is 6 times the width. What are the dimensions of the surface of the dock?

    A. $2y$ units by $12y$ units
    B. $4y$ units by $24y$ units
    C. y units by $6y$ units
    D. y units by $24y$ units

    (handwritten work: $6(2)=6y$, 12×2, $6(4)=24$, 24×4, $=1\times6$, $=1\times24$; diagram labeled $24y^2$, y, $6y$)

42. The total cost of admission to an attraction in London is $240.00 Canadian for 2 adults and 3 children. An adult admission is $15 more than a child's. How much is an **adult** admission?

    A. $42.00
    B. $45.00
    C. $48.00
    D. $57.00

    (handwritten work:
    $$\$240 = 2A + 3C \qquad A = 15 + C$$
    $$240 = 2(15+C) + 3C$$
    $$240 = 30 + 2C + 3C$$
    $$240 - 30 = 5C$$
    $$210 = 5C$$
    $$C = \frac{210}{5} = \$42$$
    $$A = 15 + C = 15 + 42 = 57$$
)

43. Your tour stops at a castle. You stop for a rest $\frac{1}{3}$ of the way up a stairway in the castle. If you climb 11 more steps, you will be $\frac{1}{2}$ of the way up. How many steps are there in the stairway?

    A. 33 steps
    B. 44 steps
    C. 66 steps
    D. 132 steps

    (handwritten work:
    $\frac{1}{2}$ way $\Rightarrow$ 33 steps

    $+11 \quad \frac{1}{6}$

    $\frac{1}{2} = \frac{1}{3} + ?$

    $\frac{1}{3}$

    22 steps

    $\frac{1\times3}{2\times3} - \frac{1\times2}{3\times2} = ?$

    $\frac{3}{6} - \frac{2}{6} = \frac{1}{6}$

    $11 - \frac{1}{6}$

    $x - \frac{1}{3} = 22$ steps SO $\frac{1}{6} = 11$

    $\frac{x}{3} + \frac{1}{6} = \frac{3}{6} = \frac{1}{2}$
)

29

From the castle, your group walks to the flower gardens.
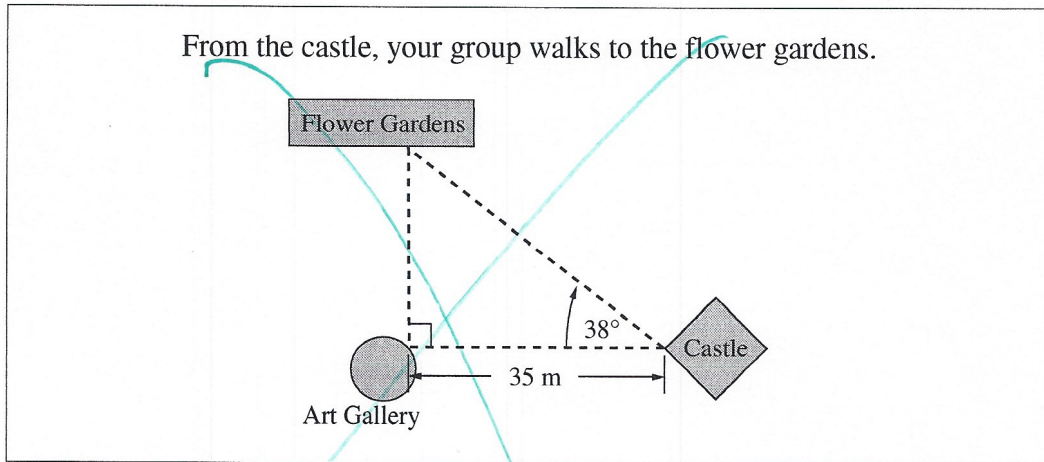
44. What is the shortest distance from the castle to the flower gardens?

A. 57 m

B. 49 m

C. 44 m

D. 28 m

You have now completed the multiple-choice questions.
Proceed directly to the numerical-response questions.

Numerical-Response Questions

1. If $a = 1.5$, $b = -2$, and $c = -5$, then $\dfrac{(a-b)^2}{c^2}$ is equal to ___**0.49**___. (Round your answer to the nearest hundredth.)

> Record your answer in the
> numerical-response section on the answer sheet.

$$\frac{(1.5-(-2))^2}{(-5)^2} = \frac{(3.5)^2}{(-5)^2} = \frac{12.25}{25} = 0.49$$

2. While travelling in Europe, you exchange $50.00 in Canadian money for local currency. You receive 8 identical bills and 4 identical coins. If each coin is worth $1.24 Canadian, then the value of each bill, in Canadian currency, is $ _____.
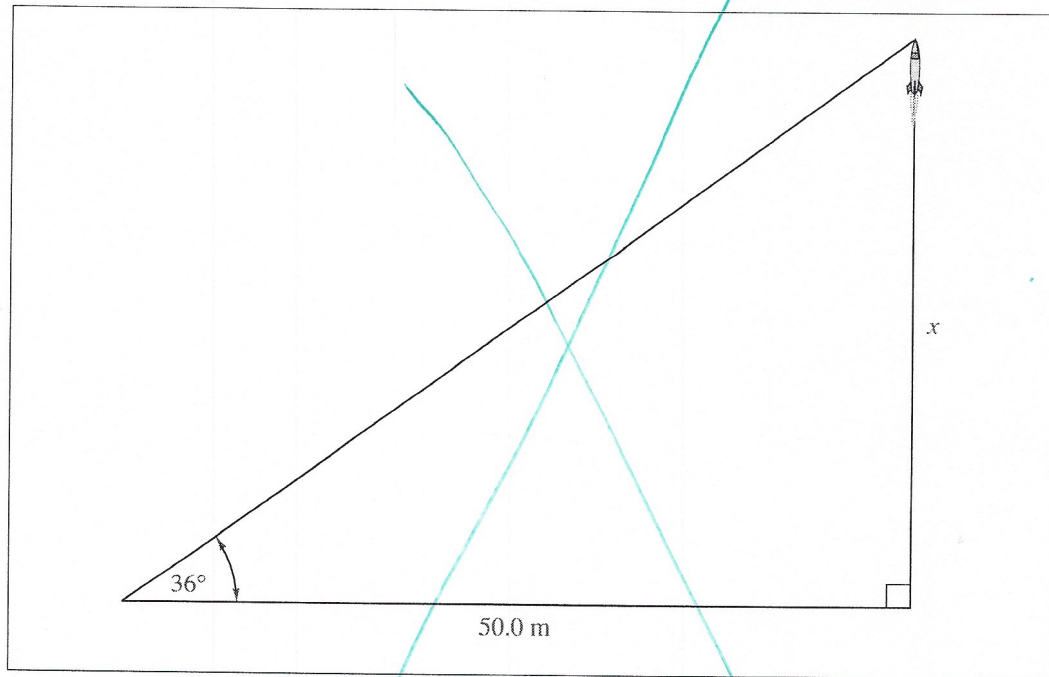
Record your answer in the numerical-response section on the answer sheet.

$5.63

$$4(1.24) = \$4.96$$

$$50 - \$4.96 = \frac{45.04}{8 \text{ bills}} = \$5.63$$

3. In a park, some people are launching model rockets. To find out the maximum height, x, that a rocket reaches, a person stands 50.0 m from the launch site and measures the angle from the ground to the rocket at its maximum height. If the angle is 36°, then the maximum height, x, of the rocket is _____ m. (Round your answer to the nearest tenth of a metre.)
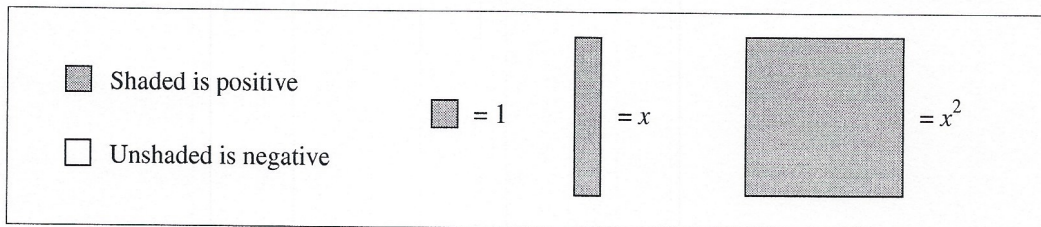
> Record your answer in the
> numerical-response section on the answer sheet.

4. What is the value of $2^3 + 4^{-1}$ expressed as a decimal?
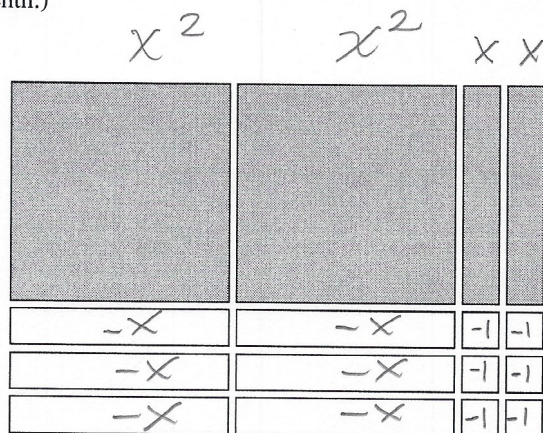
> Record your answer in the
> numerical-response section on the answer sheet.

We don't do negative exponents at this level.

34

Use the following algebra-tile legend to answer numerical-response question 5.

Shaded is positive

Unshaded is negative

$\square$ = 1 $|$ = x $\blacksquare$ = x^2

5. If $x = 4.5$, the value of the expression shown below is ___**16.5**___. (Round your answer to the nearest tenth.)

x^2 x^2 x x

$2x^2 + 2x - 6x - 6$

$-x$	$-x$	-1	-1
$-x$	$-x$	-1	-1
$-x$	$-x$	-1	-1

Record your answer in the
numerical-response section on the answer sheet.

$x^2 = 20.25$

$-x = -4.5$

$x = 4.5$

$2(20.25) + 2(4.5) - 6(4.5) - 6 =$

$40.5 + 9 - 27 - 6$

$49.5 - 33 = 16.5$

35

6. A foghorn sounds a blast for 2 seconds and then is silent for 8 seconds. This pattern continues for $3\frac{1}{2}$ hours. How many blasts does the foghorn make in this period of time?

| Record your answer in the
numerical-response section on the answer sheet. |
|---|

1260

$\dfrac{2\ sec}{blast}$ $\dfrac{8\ seconds}{silence}$ $\Rightarrow$ 10 secs per cycle

$3\frac{1}{2}$ hours $= \dfrac{7}{2} = 3.5$ hours

$3.5 \times 60 = 210\ min = 12{,}600\ sec$

$\dfrac{12600\ sec}{10\ sec} = 1260\ cycles$

$\downarrow$

1260 blasts that last 2 seconds

You have now completed the test.
If you have time, you may wish to check your answers.

Achievement Test 2000
Grade 9 Mathematics

Question	Key	Question	Key	Question	Key
1	D	23	C	NR1	0.49
2	D	24	A	NR2	5.63
3	D	25	B	NR3	36.3
4	C	26	D	NR4	8.25
5	A	27	A	NR5	16.5
6	C	28	D	NR6	1260
7	D	29	B		
8	A	30	D		
9	B	31	A		
10	A	32	A		
11	B	33	C		
12	A	34	B		
13	C	35	C		
14	B	36	D		
15	D	37	A		
16	B	38	D		
17	D	39	B		
18	C	40	B		
19	B	41	A		
20	B	42	D		
21	B	43	C		
22	A	44	C		