Multiplying and Dividing Integers (Continued)

2. You multiply a number by (–3) and the product is negative. List four possible numbers you could have multiplied by –3 and four you could not have multiplied.

3. You multiply two integers and the product is (–36).
   a) List four possible pairs of integers.

   b) Explain why –4 × (–9) is not a solution.

4. Is the statement true or false? Explain.
   a) The product of two positive integers is always positive.

   b) The product of two negative integers is always negative.

5. a) Complete this pattern. What do you notice?

   3 × (–2) =

   2 × (–2) =

   1 × (–2) =

   0 × (–2) =

   (–1) × (–2) =

   (–2) × (–2) =

   b) What pattern could you create to show why (–3) × (–6) = (+18)?

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6. Karan says that since 3 × 4 is the opposite of –3 × 4, then –3 × (–2) should be the opposite of 3 × (–2).
   a) Do you agree with Karan?

   b) How would that help Karan figure out (–3) × (–2)?