Factoring

1. Using the Digital Manipulatives, build as many rectangles as possible that represent the given number.

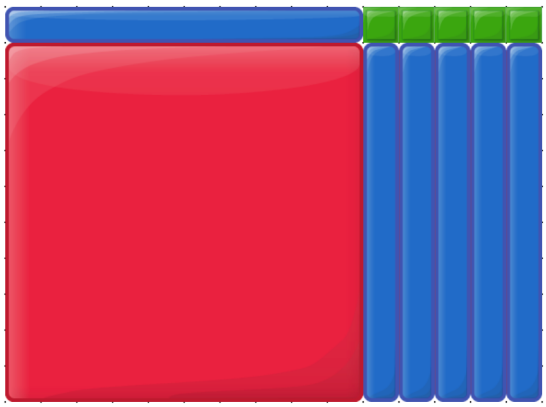
   If you have the Integer Block Kit and algebra inserts, you can also use these to complete this activity.

   Example: 24 = 2 • 12 = 3 • 8 = 4 • 6

   A. 10
   B. 12
   C. 36
   D. 18

2. Using the images of the manipulatives, determine the sign patterns of the expressions.

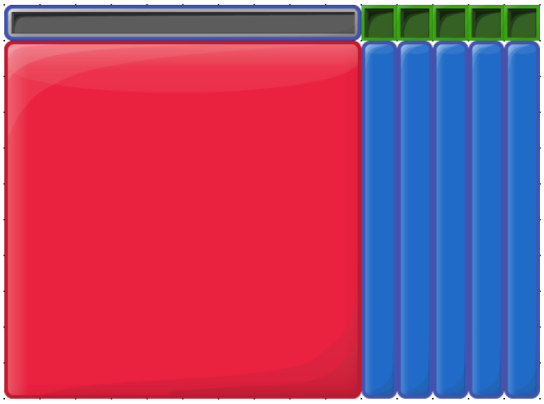
   A. $x^2 + 6x + 5$

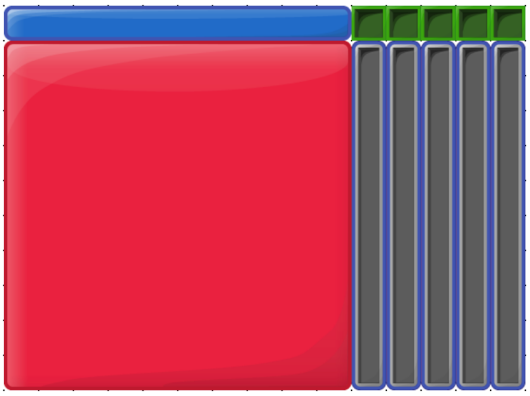
   B. $x^2 - 6x + 5$

   C. $x^2 + 4x + 5$

   D. $x^2 - 4x + 5$

2.

A. $(x + 5)(x + 1)$

B. $(x - 5)(x - 1)$

C. $(x + 5)(x - 1)$

D. $(x - 5)(x + 1)$

1.

A.

B.

C. $1 \cdot 36 = 2 \cdot 18 = 3 \cdot 12 = 4 \cdot 9$

D. $1 \cdot 18 = 2 \cdot 9 = 3 \cdot 6$