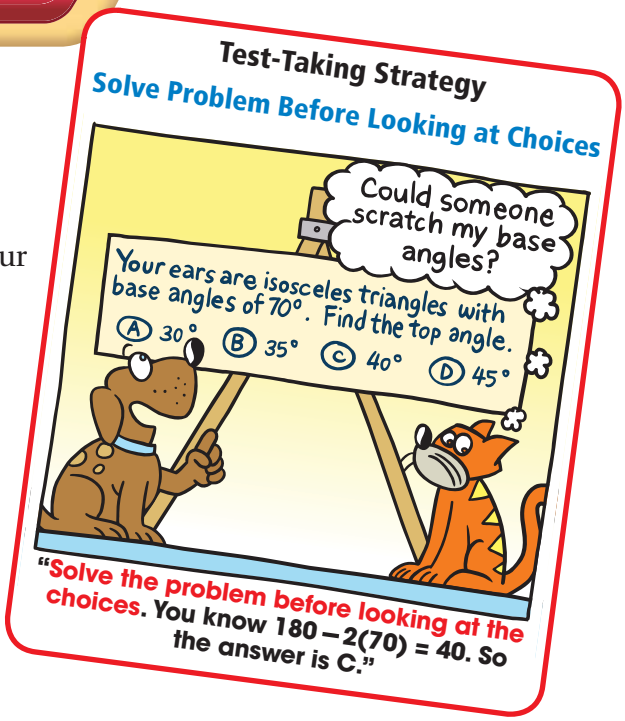
English Spanish

# 5 Standardized Test Practice




**1.** The border of a Canadian one-dollar coin is shaped like an 11-sided regular polygon. The shape was chosen to help visually-impaired people identify the coin. How many degrees are in each angle along the border? Round your answer to the nearest degree.

**2.** A public utility charges its residential customers for natural gas based on the number of therms used each month. The formula below shows how the monthly cost $C$ in dollars is related to the number $t$ of therms used.

$$C = 11 + 1.6t$$

Solve this formula for $t$.

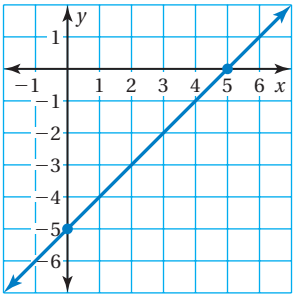
**A.** $t = \dfrac{C}{12.6}$

**B.** $t = \dfrac{C - 11}{1.6}$

**C.** $t = \dfrac{C}{1.6} - 11$

**D.** $t = C - 12.6$

**3.** Which equation matches the line shown in the graph?



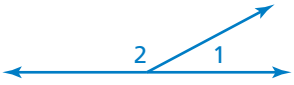

**F.** $y = x - 5$

**G.** $y = x + 5$

**H.** $y = -x - 5$

**I.** $y = -x + 5$

**4.** $\angle 1$ and $\angle 2$ form a straight angle. $\angle 1$ has a measure of 28°. Find the measure of $\angle 2$, in degrees.




**5.** Which equation represents a linear function?

**A.** $y = x^2$

**B.** $y = \dfrac{2}{x}$

**C.** $xy = 1$

**D.** $x + y = 1$

**6.** A shipment of 2,000 laptop and desktop computers weighs 34,000 pounds. Each laptop computer weighs 8 pounds and each desktop computer weighs 20 pounds. Let $\ell$ represent the number of laptop computers and $d$ represent the number of desktop computers. Which system of equations could be used to find how many laptop computers are in the shipment?

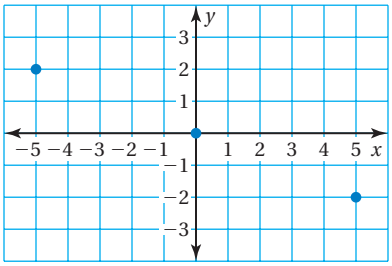
**F.** $\ell + d = 2{,}000$
$20\ell + 8d = 34{,}000$

**G.** $\ell + d = 34{,}000$
$20\ell + 8d = 2{,}000$

**H.** $\ell + d = 2{,}000$
$8\ell + 20d = 34{,}000$

**I.** $\ell + d = 34{,}000$
$8\ell + 20d = 2{,}000$

**7.** What is the domain of the function graphed in the coordinate plane?




**A.** $-5, 0, 5$

**B.** $-2, 0, 2$

**C.** $-5, -2, 0, 2, 5$

**D.** $-5, 2$

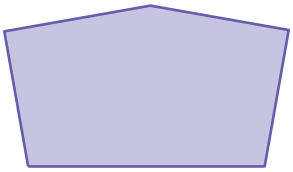
**8.** The sum $S$ of the angle measures of a polygon with $n$ sides can be found using a formula.

Think Solve Explain

*Part A* Write the formula.

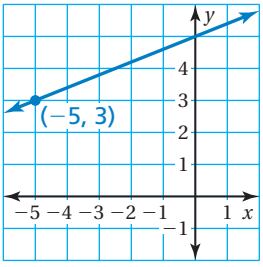
*Part B* A quadrilateral has angles measuring 100, 90, and 90 degrees. Find the measure of its fourth angle. Show your work and explain your reasoning.

*Part C* The sum of the measures of the angles of the pentagon shown is 540 degrees. Divide the pentagon into triangles to show why this must be true. Show your work and explain your reasoning.



**9.** The line shown in the graph has a slope of $\frac{2}{5}$.

What is the equation of the line?




**F.** $x = \frac{2}{5}y + 5$

**G.** $y = \frac{2}{5}x + 5$

**H.** $x = \frac{2}{5}y + 1$

**I.** $y = \frac{2}{5}x + 1$

**10.** On a hot summer day, the temperature was 95°F, the relative humidity was 75%, and the Heat Index was 122°F. For every degree that the temperature rises, the Heat Index increases by 4 degrees. The temperature rises to 98°F. What is the Heat Index?

**A.** 99°F

**B.** 107°F

**C.** 126°F

**D.** 134°F

**11.** Which value of $x$ makes the equation below true?

$$5x - 3 = 11$$

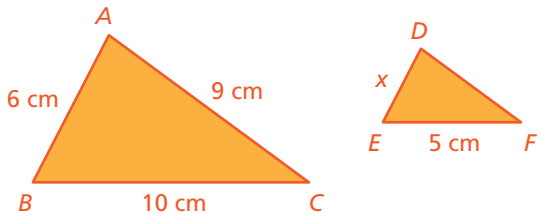
**F.** 1.6

**G.** 2.8

**H.** 40

**I.** 70

**12.** In the diagram below, $\triangle ABC \sim \triangle DEF$. What is the value of $x$?



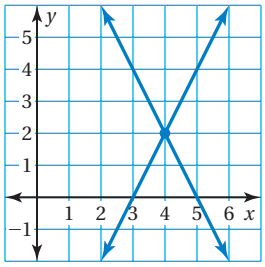

**A.** 1 cm

**B.** 3 cm

**C.** 4.5 cm

**D.** 6 cm

**13.** A system of linear equations is shown in the coordinate plane below. What is the solution for this system?




**F.** (0, 10)

**G.** (3, 0)

**H.** (4, 2)

**I.** (5, 0)