PRACTICE FOR TAKS OBJECTIVE 8
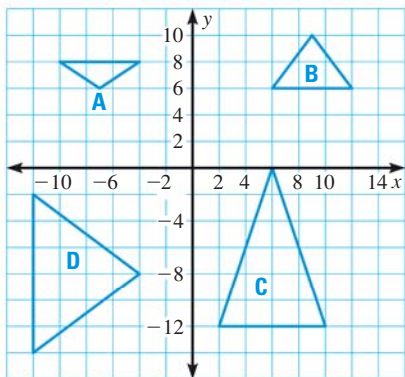
1. Which triangles are similar?

A Triangle A and triangle B

B Triangle A and triangle C

C Triangle B and triangle D

D Triangle C and triangle D

2. Tara uses 100 feet of fencing to enclose a rectangular garden that has a length of 30 feet. About how much fencing does she need to enclose a similar rectangular garden that has a length of 12.5 feet?

F 41.7 ft

G 50.0 ft

H 61.5 ft

J 120.0 ft

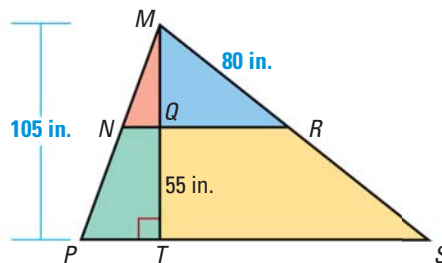**3.** Which dimensions correspond to a cylinder that is similar to the one below?
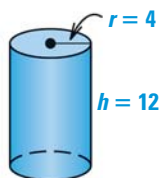
A $r = 6$ units, $h = 14$ units

B $r = 7$ units, $h = 21$ units

C $r = 8$ units, $h = 16$ units

D $r = 9$ units, $h = 36$ units

4. What is the approximate area of the shaded region?
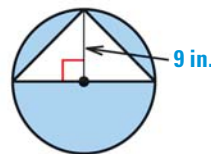
F 92.5 in.^{2}

G 128.5 in.^{2}

H 173.5 in.^{2}

J 214.0 in.^{2}

5. On the window shown, $\overline{NR}$ and $\overline{PS}$ are parallel. Find the length of $\overline{MS}$.

A 66 in.

B 88 in.

C 146 in.

D 168 in.

MIXED TAKS PRACTICE

6. How does the graph of $y = x^2 + 1$ differ from the graph of $y = x^2 - 5$? *TAKS Obj. 5*

F The graph of $y = x^2 + 1$ is narrower than the graph of $y = x^2 - 5$.

G The graph of $y = x^2 + 1$ is wider than the graph of $y = x^2 - 5$.

H The graph of $y = x^2 + 1$ is 6 units above the graph of $y = x^2 - 5$.

J The graph of $y = x^2 + 1$ is 6 units to the right of the graph of $y = x^2 - 5$.