

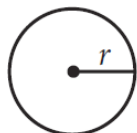


**Titan Learning Center**  
**Mathematics SAT Prep**  
**Week 6 Set A**



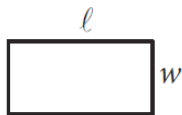
**CALCULATOR ALLOWED – Multiple Choice**

**REFERENCE** (This reference sheet is given on the SAT!)

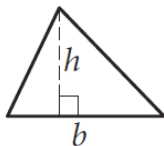


$$A = \pi r^2$$

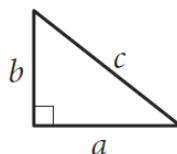
$$C = 2\pi r$$



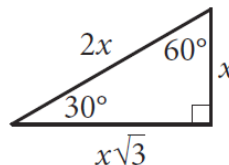
$$A = \ell w$$



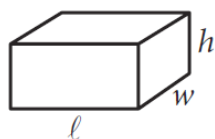
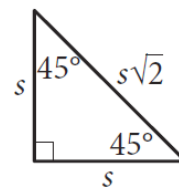
$$A = \frac{1}{2}bh$$



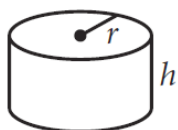
$$c^2 = a^2 + b^2$$



Special Right Triangles



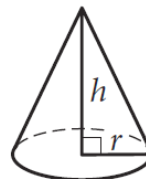
$$V = \ell wh$$



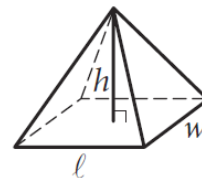
$$V = \pi r^2 h$$



$$V = \frac{4}{3}\pi r^3$$



$$V = \frac{1}{3}\pi r^2 h$$



$$V = \frac{1}{3}\ell wh$$

The number of degrees of arc in a circle is 360.

The number of radians of arc in a circle is  $2\pi$ .

The sum of the measures in degrees of the angles of a triangle is 180.

**1**

If  $y = kx$ , where  $k$  is a constant, and  $y = 24$  when  $x = 6$ , what is the value of  $y$  when  $x = 5$  ?

- A) 6
- B) 15
- C) 20
- D) 23

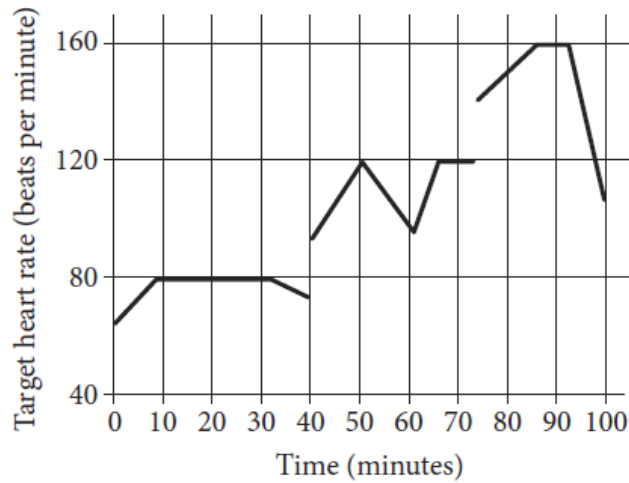
**2**

If  $16 + 4x$  is 10 more than 14, what is the value of  $8x$  ?

- A) 2
- B) 6
- C) 16
- D) 80

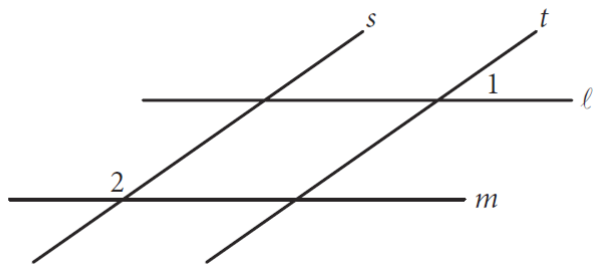
3

John runs at different speeds as part of his training program. The graph shows his target heart rate at different times during his workout. On which interval is the target heart rate strictly increasing then strictly decreasing?



- A) Between 0 and 30 minutes
- B) Between 40 and 60 minutes
- C) Between 50 and 65 minutes
- D) Between 70 and 90 minutes

4

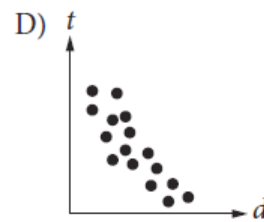
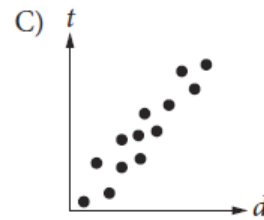
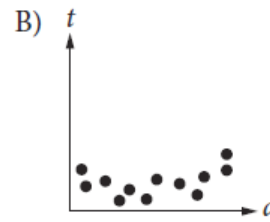
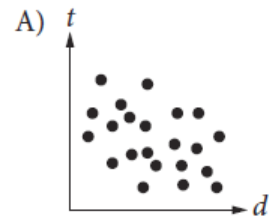


In the figure above, lines  $\ell$  and  $m$  are parallel and lines  $s$  and  $t$  are parallel. If the measure of  $\angle 1$  is  $35^\circ$ , what is the measure of  $\angle 2$ ?

- A)  $35^\circ$
- B)  $55^\circ$
- C)  $70^\circ$
- D)  $145^\circ$

5

Which of the following graphs best shows a strong negative association between  $d$  and  $t$ ?



TLC Stamp

