

1. Byron has 72 coins in his coin jar. The coin jar contains only dimes and quarters. If he has \$14.70 in his coin jar, which equation can be used to determine q , the number of quarters he has?

1. $14.70 + 0.25q = 72$

2. $0.10(q - 72) + 0.25q = 14.70$

→ 3. $0.10(72 - q) + 0.25q = 14.70$

✗ 4. $0.10q + 0.25(72 - q) = 14.70$

of dimes

$72 - q$

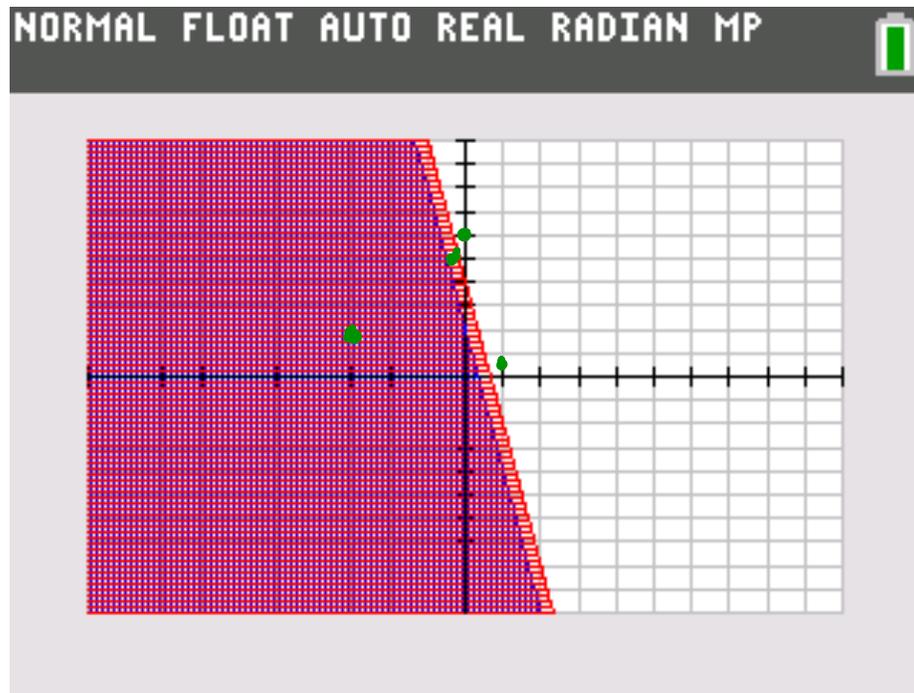
2. Which point is a solution to the system below?

$$2y < -12x + 4$$

$$y < -6x + 4$$

$$y < -6x + 2$$

1. $(1, \frac{1}{2})$
2. $(0, 6)$
3. $(-\frac{1}{2}, 5)$
4. $(-3, 2)$



3. The formula for volume of a cone is $V = \left(\frac{1}{3}\pi r^2 h\right)$. The height, h , of the cone by be expressed as

1. $\frac{3V}{\pi r^2}$
2. $\frac{V}{3\pi r^2}$
3. $\sqrt{3V\pi r^2}$
4. $\frac{1}{3}V\pi r^2$

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

4. Which value of x is a solution of the inequality $25x - 100 < 250$?

1. 13 2. 14
3. 15 4. 16

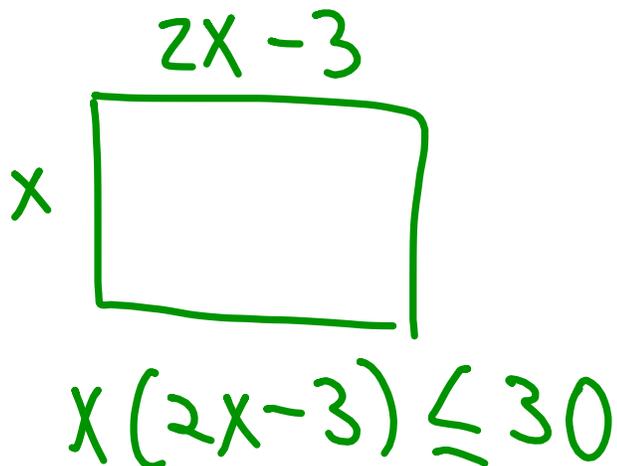
$$25x - 100 < 250$$

$$\frac{25x}{25} < \frac{350}{25}$$

$$x < 14$$

5. The length of a rectangle is three feet less than twice its width. If x represents the width of the rectangle, in feet, which inequality represents the area of the rectangle that is *at most* 30 square feet?

1. $x(2x - 3) \leq 30$
2. $x(2x - 3) \geq 30$
3. $x(3 - 2x) \leq 30$
4. $x(3 - 2x) \geq 30$



6. What is the solution of $3(2m - 1) \leq 4m + 7$?

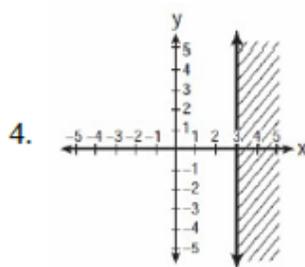
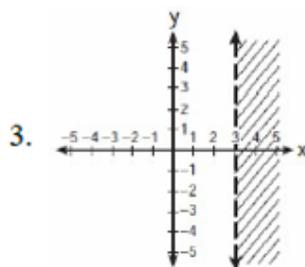
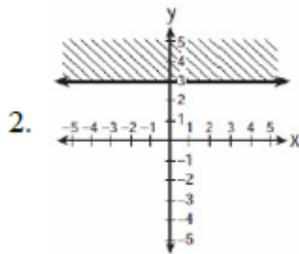
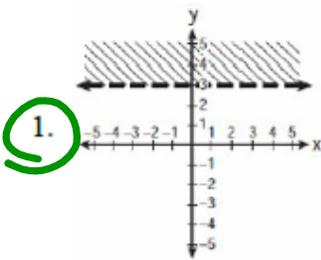
1. $m \leq 5$ 2. $m \geq 5$
3. $m \leq 4$ 4. $m \geq 4$

$$6m - 3 \leq 4m + 7$$

$$2m - 3 \leq 7$$

$$2m \leq 10 \quad m \leq 5$$

7. Which graph represents the inequality $y > 3$?



$>$ - - - -
 or
 0

\geq - - - -
 or
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