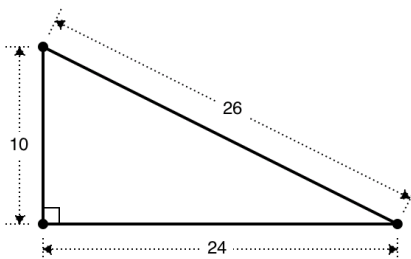


Review Problems

- Consider a rectangle with sides 8 m and 25 m long.
 - Compute the perimeter of the rectangle. **Include units in your computation and answer.**
 - Compute the area of the rectangle. **Include units in your computation and answer.**
- Consider the right triangle shown on the picture below. Units are measured in feet.



- Compute the perimeter of the triangle. **Include units in your computation and answer.**
 - Compute the area of the triangle. **Include units in your computation and answer.**
- Simplify each of the following.
 - $2(x-3)^2 - (x-3)(2x-1)$
 - $(x-2)(x^2+2x+4)$
 - $(2x-1)^2 - (2x+1)^2$
 - $(3\sqrt{5}-2)^2$
 - $(3\sqrt{7}+5)(3\sqrt{7}-5)$
 - Simplify $2x^2 - x + 5$ if $x = 3\sqrt{5} - 2$.
 - Solve each of the following equations.
 - $\frac{3x+2}{5} - \frac{2x-1}{3} = x+5$
 - $\frac{2}{3}(y+1) - \frac{1}{4}(y-1) = y-9$
 - $\frac{3x-2}{4} - \frac{2x+1}{3} = \frac{x-10}{12}$
 - $3(m-1)^2 - 3m(m-5) = 3(3m-7)$
 - $(4x-5)(x+3) - (2x-1)^2 = 8(x-2)$
 - $(x-4)^2 + (x-3)^2 = 2(x-5)^2 - 1$

Answers

- $P = 2(8\text{ m}) + 2(25\text{ m}) = 66\text{ m}$
 - $A = 8\text{ m}(25\text{ m}) = 200\text{ m}^2$
- $P = 10\text{ ft} + 24\text{ ft} + 26\text{ ft} = 60\text{ ft}$
 - $A = \frac{1}{2}(10\text{ ft})(24\text{ ft}) = 120\text{ ft}^2$
- $-5x + 15$
 - $x^3 - 8$
 - $-8x$
 - $-12\sqrt{5} + 49$
 - 38
- $-27\sqrt{5} + 105$
- -4
 - 17
 - all numbers are solution
 - no solution
 - 0
 - 4