

Station # 1 : Solve for the given variable.

$$\textcircled{1} \quad x = x_0 + v_0 t + \frac{1}{2} a t^2 \quad v_0 = \underline{\hspace{2cm}}$$

$$\textcircled{2} \quad W = F \Delta r \cos \theta \quad \theta = \underline{\hspace{2cm}}$$

$$\textcircled{3} \quad U_c = \frac{1}{2} C V^2 \quad V = \underline{\hspace{2cm}}$$

$$\textcircled{4} \quad V = IR \quad \text{and} \quad P = IV \quad P(\text{in term of } I \text{ \& } R) = \underline{\hspace{2cm}}$$

$$\textcircled{5} \quad v = \sqrt{\frac{3RT}{M}} \quad M = \underline{\hspace{2cm}}$$

Station #2 : Solve the quadratic equation.

$$\textcircled{1} \quad 2x^2 + 10x + 4 = 1$$

$$\textcircled{2} \quad 5x^2 + 15x - 5 = -15$$

$$\textcircled{3} \quad x = x_0 + v_0 t + \frac{1}{2} a t^2$$

Station #3 : Find the solution that will satisfy the system of equations.

$$\textcircled{1} \quad y = -3x + 4$$

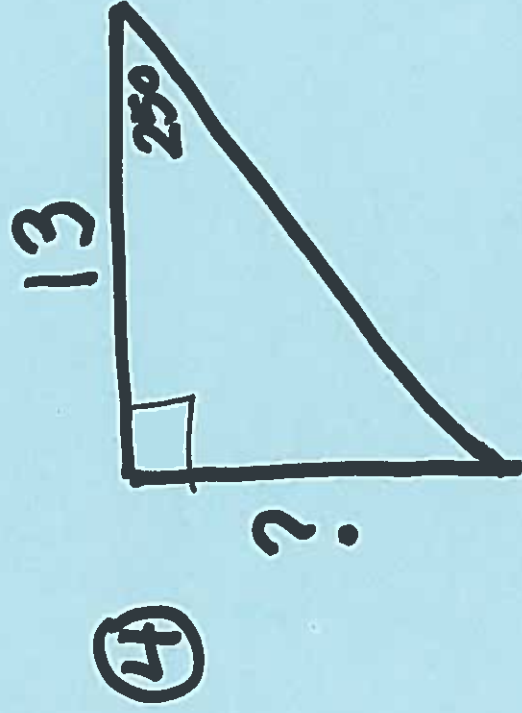
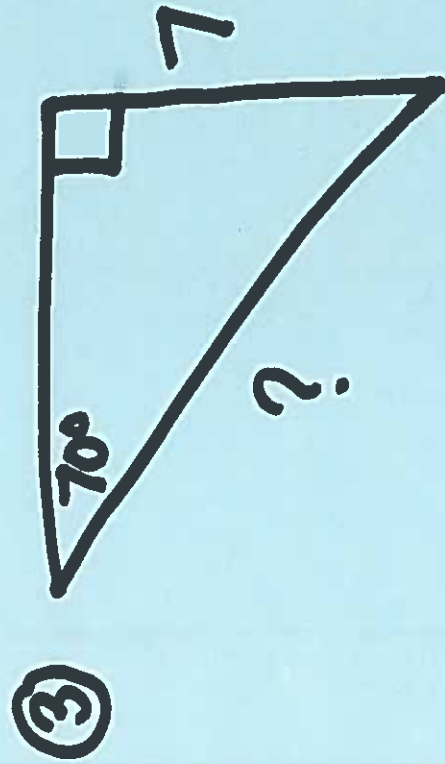
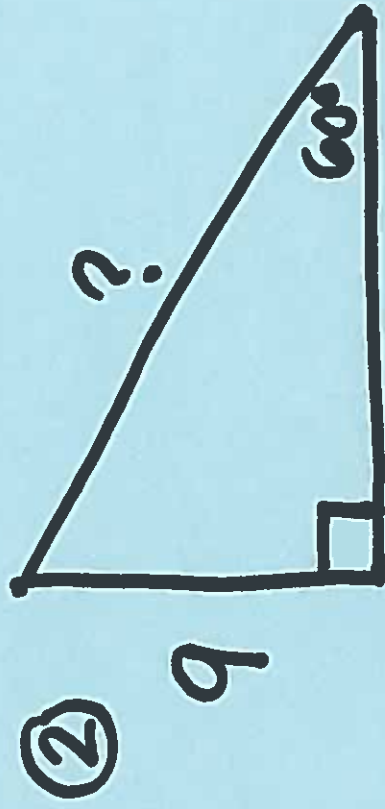
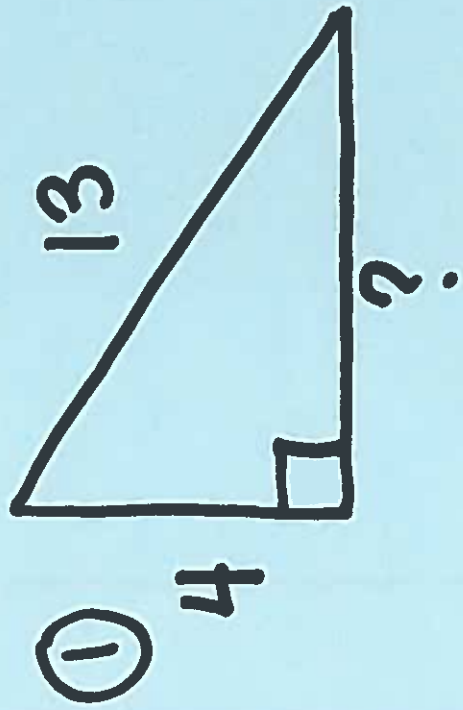
$$y = 3x - 2$$

$$\textcircled{2} \quad 8x - 6y = -20$$

$$-16x + 7y = 30$$

$$\textcircled{3} \quad \begin{array}{l} 4x + 2y = 10 \\ x - y = 13 \end{array}$$

Station #4 : Find the missing side.



Station #5:

(a) Graph the data.

(b) Is there a relationship between x & y ?
What type?

(c) Write an equation relating x & y .

①

x	y
1	1
2	-1
3	-3
4	-5
5	-7

②

x	y
2	1
4	4
6	9
8	16
10	25

Station 6:

Scientific Notation

① $3.24 \times \underline{\hspace{2cm}} = 0.0000324$

② $\underline{\hspace{2cm}} \times 10^5 = 3,700,000$

③ $4.82 \times 10^{-3} = \underline{\hspace{2cm}}$

Unit conversion

Convert to:

① 5165 cm

② 268 min

(a) meters / seconds

(b) millimeters / hours

(c) Kilometers / days

(d) inches / years

(e) feet

(f) miles