

# HWU-A2

1. a.  $(3, -4) \text{ \& } (7, 2)$

$$\text{slope} = \frac{-4-2}{3-7} = \frac{-6}{-4} = \frac{3}{2}$$

b.  $(5, 3) \text{ \& } (2, 5)$

$$\frac{3-5}{5-2} = \frac{-2}{3}$$

c.  $(-0.02, 3.2) \text{ \& } (0.08, -2.3)$

$$\frac{3.2 - -2.3}{-0.02 - 0.08} = \frac{5.5}{-1} = -5.5$$

2. a.  $y = 3x - 2$

slope: 3

b.  $y = 4.2 - 2.8x$

slope: -2.8

c.  $y = 5(3x - 3) + 2$

$$y = 15x - 13$$

slope: 15

d.  $y - 2.4x = 5$

$$y = 2.4x + 5$$

slope: 2.4

e.  $4.7x + 3.2y = 12.9$

$$y = -1.47x + 4.03$$

slope: -1.47

f.  $\frac{2}{3}y = \frac{2}{3}x + \frac{1}{2}$

slope: 1

3. a.  $y = 14.3$

b.  $x = 6.5$  to 25

c.  $a = -24$

d.  $b = -1/4$

4. a. (i)  $y = \frac{-4}{3}x - 2$   
(ii)  $y = \frac{3}{4}x - 2$

b. (i)  $y = \frac{3}{2}x - 1$

(ii)  $y = \frac{3}{2}x + 4$

c. 4a are opposite reciprocals. They are  $\perp$  (perpendicular)

d. 4b have the same slopes & are parallel

5.  $l: 2.5$

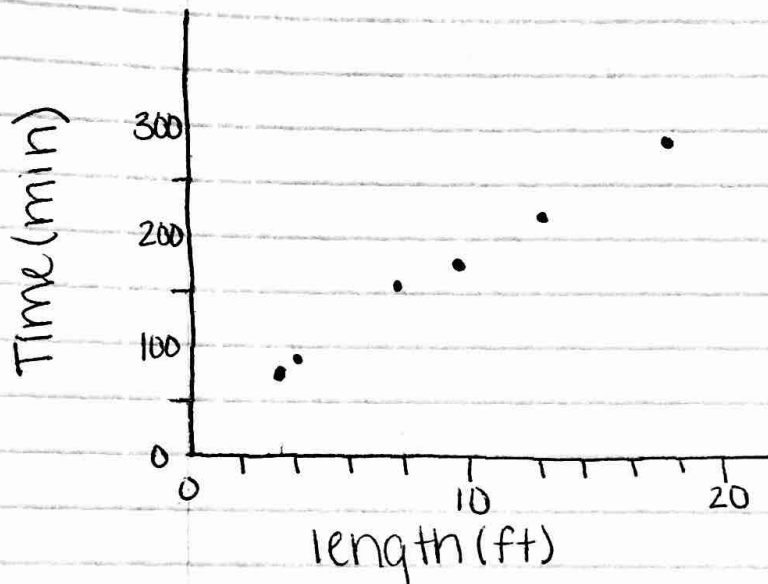
$n: -2/5$

6. a. rocket A, steepest slope

b. rocket B, smallest slope

c. rocket C, the slope

10. a. ~~Time~~ length of the hallway, it determines the time of the job.



b.  $(3.5, 85)$  &  $(9.5, 175)$

$$\frac{175 - 85}{9.5 - 3.5} = \frac{90}{6} = 15$$

The slope means it takes 15 min/ft.

c. The first 2 pts because of their spacing

d.  $y = 15x + b$   
 $92 = 15(4) + b$   
 $32 = b$

The job time no matter the size of the job.