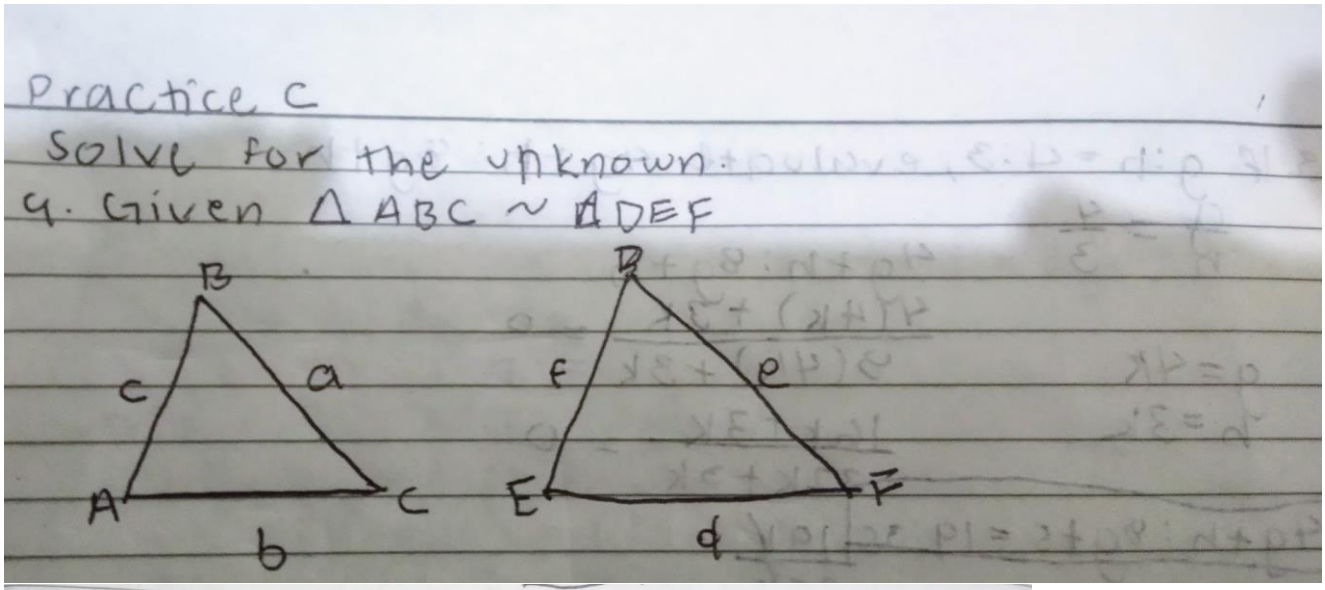
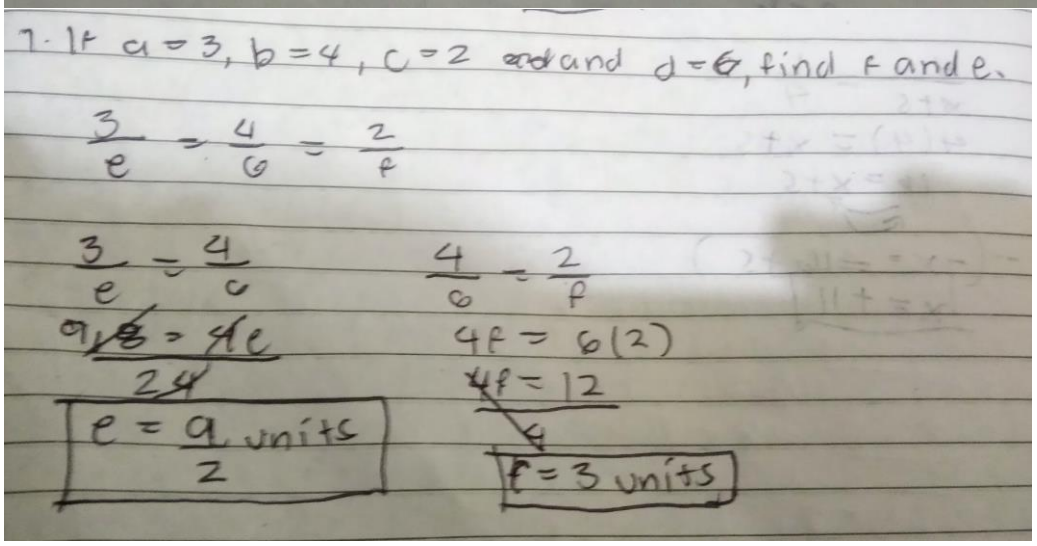
Angeles City Science High School

Mathematics 9

Name: Paul Gerald D. Pare **Section:** 9 - Adenine





2. If $a = 5$, $b = 7$, $c = 2$, and $f = 4$, find d and e.

$$\frac{1}{2} = \frac{5}{e} = \frac{7}{d}$$

$$\frac{1}{2} = \frac{5}{e}$$

$e = 2(5)$

$\boxed{e = 10 \text{ units}}$

$$\frac{1}{2} = \frac{7}{d}$$

$\boxed{d = 14 \text{ units}}$

3. If $a = 3$, $b = 6$, $c = 4$, $d = 24$, $e = 12$, and $f = x + 5$

$$\frac{4}{x+5} = \frac{6}{24} = \frac{12}{4}$$

$$\frac{4}{x+5} = \frac{1}{4}$$

$4(4) = x + 5$

$16 = x + 5$

$-(-x = -16 + 5)$

$\boxed{x = +11}$

4. If $a=5$, $b=x+2$, $c=x+1$, $d=8$, $e=10$, and $f=6$, find x.

$$\frac{2}{1}=\frac{6}{x+1}=\frac{8}{x+2}$$

$$\frac{2}{1}=\frac{6}{x+1}$$

$$2(x+1)=6$$

$$2x+2=6$$

$$2x=6-2$$

$$\frac{2x}{2}=\frac{4}{2}$$

$$\boxed{x=2}$$

$$\frac{2}{1}=\frac{8}{x+2}$$

$$2(x+2)=8$$

$$2x+4=8$$

$$2x=8-4$$

$$\frac{2x}{2}=\frac{4}{2}$$

$$\boxed{x=2}$$