

7.2.1

HWK

7-100)

$$a) \frac{x}{10} = \frac{6}{15}$$

$$\frac{x \xrightarrow{\times 2} 2}{10} = \frac{2}{5}$$

$$x = 4$$

$$b) \frac{12}{9} = \frac{8}{x}$$

$$\frac{4 \xrightarrow{\times 2} 8}{3} = \frac{8}{x}$$

$$x = 6$$

$$c) \frac{16}{38} = \frac{200}{m}$$

$$\frac{8 \xrightarrow{\times 25} 200}{19} = \frac{200}{m}$$

$$m = 475$$

7-101)

3 shades of white
4 shades of tan
2 shades of blue
3 shades of green
4 shades of pink

16 total colors

$$P(\text{Pink or blue}) = \frac{4}{16} + \frac{2}{16} = \frac{6}{16} = \frac{3}{8}$$

7-102) sale \$28 original \$40

$$\begin{array}{r} 40 \\ -28 \\ \hline 12 \end{array}$$

$$\frac{12}{40} = 30\%$$

7-103)

$$\begin{aligned} \text{a) } \frac{3}{4} - \frac{1}{3} + \left(-\frac{5}{24}\right) \\ \frac{18}{24} - \frac{8}{24} + \left(-\frac{5}{24}\right) \\ \frac{10}{24} + \left(-\frac{5}{24}\right) \\ \frac{5}{24} \end{aligned}$$

$$\begin{aligned} \text{b) } \frac{10}{12} \div \frac{1}{4} \\ \frac{10}{12} \cdot \frac{4}{1} \\ \frac{40}{12} = \frac{10}{3} = 3\frac{1}{3} \end{aligned}$$

$$\begin{aligned} \text{c) } 3\frac{1}{2} \cdot 1\frac{3}{8} \\ \frac{7}{2} \cdot \frac{11}{8} \\ \frac{77}{16} = 4\frac{13}{16} \end{aligned}$$

$$\begin{aligned} \text{d) } \frac{-20}{7} \div \frac{1}{3} \\ \frac{-20}{7} \cdot \frac{3}{1} \\ \frac{-60}{7} \text{ or } -8\frac{4}{7} \end{aligned}$$

$$\begin{aligned} \text{e) } \frac{-8}{25} \cdot \left(-\frac{15}{32}\right) \\ \frac{3}{20} \end{aligned}$$

$$\begin{aligned} \text{f) } \frac{9}{4} \div \left(-\frac{2}{3}\right) \\ \frac{9}{4} \cdot \left(-\frac{3}{2}\right) \\ \frac{-27}{8} = -3\frac{3}{8} \end{aligned}$$

$$\text{g) } \frac{8}{21} + \left(-\frac{3}{7}\right)$$

$$\begin{aligned} \frac{8}{21} + \frac{-9}{21} \\ -\frac{1}{21} \end{aligned}$$

$$\text{h) } \frac{7}{4} \cdot \left(-\frac{2}{5}\right) \cdot \frac{3}{5}$$

$$\frac{-14}{20} \cdot \frac{3}{5}$$

$$\frac{-42}{100} = -\frac{21}{50}$$

7-104) Steph simple interest 3.5%/month
has \$1325 in her account
5 month balance?

$$I = P \cdot r \cdot t$$

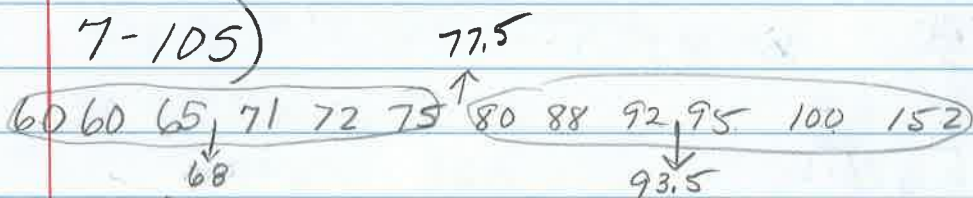
$$I = 1325 \cdot (0.035) (5)$$

$$I = 231.88$$

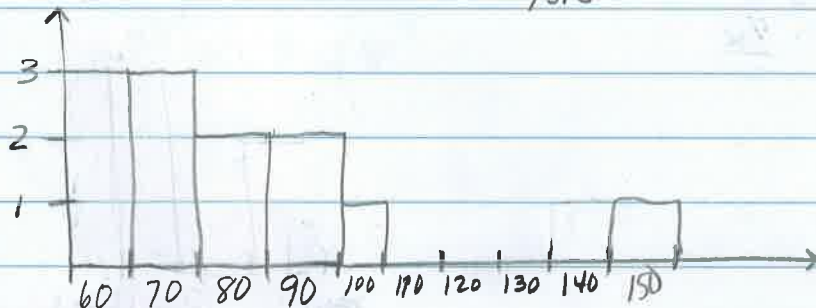
$$\$1325 + 231.88 = \$1556.88$$

She will have \$1556.88 after 5 months.

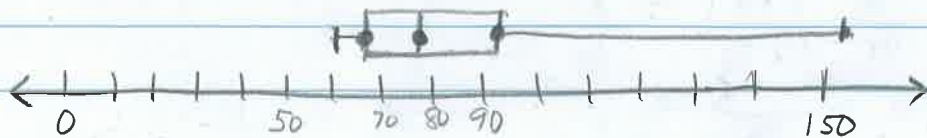
7-105)



(a)



(b)



$$Q1 = 68$$

$$\text{Med} (Q2) = 77.5$$

$$Q3 = 93.5$$

(c) Median because 152 appears to be an outlier.

(d) Box Plot (Box & Whisker Plot)