

Student Name _____

Parent Sign _____

Alg.
Ch. 4
Review

1) $\frac{\$1.44}{16}$

$16 \overline{) 1.44}$
 $\frac{09}{144}$
 $\frac{144}{144}$
\$0.09/oz
(A)

2) $\frac{\$7.80}{h} \times \frac{100¢}{\$1} \times \frac{1h}{60min} = \frac{780¢}{60min}$

$6 \overline{) 78}$
 $\frac{13}{18}$
 $\frac{18}{18}$
13¢/min
(A)

3) $\frac{2}{10} \times \frac{11}{x}$
 $\frac{2x}{2} = \frac{110}{2}$

x = 55

(A)

4) $\frac{x-8}{5} \times \frac{2}{4}$

$4x - 32 = 10$
 $+32 \quad +32$

$\frac{4x}{4} = \frac{42}{4}$

x = $\frac{21}{2}$ (C)

5) $\frac{w+14}{4w+6} \times \frac{3}{4}$

$4w + 56 = 12w + 18$
 $-4w \quad -4w$

$56 = 8w + 18$
 $-18 \quad -18$

$\frac{38}{8} = \frac{8w}{8}$

$\frac{19}{4} = w$ (C)

6) miles/gal

$\frac{220}{10} \times \frac{550}{x}$

$220x = 5500$
 $\frac{220x}{220} = \frac{5500}{220}$

x = 25 gal

(D)

7) chap. stud.

$\frac{2}{25} \times \frac{x}{80}$

$\frac{160}{25} = \frac{25x}{25}$

6.4 = x

7 people (D)

8) lit. big

$\frac{x}{11} \times \frac{3}{8}$

$\frac{8x}{8} = \frac{33}{8}$

x = 4.1 ft

(A)

9) lit. big

$\frac{x}{18} \times \frac{17}{25}$

$\frac{25x}{25} = \frac{306}{25}$

x = 12.2 cm

(A)

10) tree boy

$\frac{x}{5} \times \frac{10}{2.5}$

$\frac{2.5x}{2.5} = \frac{50}{2.5}$

x = 20 ft

(D)

11) map actual

$\frac{1}{12} \times \frac{2.25}{x}$

x = 27 mi

$\frac{1}{12} = \frac{3.5}{x}$

x = 42 mi

(A)

$25 \overline{) 306.00}$
 $\frac{12.24}{56}$
 $\frac{50}{100}$
 $\frac{50}{100}$

$25 \overline{) 500}$
 $\frac{20}{50}$

12) $\frac{is}{of} = \frac{90}{100}$

$\frac{18}{20} \times \frac{x}{100}$

$\frac{1800}{20} = \frac{20x}{20}$

90% = x (C)

13) $\frac{x}{60} \times \frac{60}{100}$

$\frac{100x}{100} = \frac{3600}{100}$

x = 36

(C)

14) $\frac{42}{x} \times \frac{30}{100}$

$\frac{4200}{30} = \frac{30x}{30}$

140 = x

(C)

$3 \overline{) 420}$
 $\frac{140}{12}$
 $\frac{12}{12}$

$$15) \frac{81.04}{x} = \frac{5}{100}$$

$$\frac{8104}{5} = \frac{5x}{5}$$

$$\$1620.80 = x$$

(D)

$$\begin{array}{r} 5 \overline{) 8104.0} \\ \underline{5} \\ 31 \\ \underline{30} \\ 10 \\ \underline{10} \\ 0 \\ \underline{0} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$$16) I = prt$$

$$313.42 = p(0.025)(3)$$

$$313.42 = p(0.075)$$

$$\$4178.93 = p$$

(D)

$$\begin{array}{r} .025 \\ \times 3 \\ \hline .075 \end{array}$$

$$\begin{array}{r} .025 \overline{) 4178.93} \\ \underline{300} \\ 134 \\ \underline{134} \\ 75 \\ \underline{75} \\ 0 \\ \underline{0} \\ 000 \end{array}$$

$$17) \frac{\text{change}}{\text{original}} = \frac{r}{100}$$

$$\frac{18}{50} = \frac{r}{100}$$

$$\frac{100}{50} = \frac{50r}{50}$$

$$20\% = r$$

(B)

$$18) .93m$$

$$\frac{1}{2} \text{ of } .01$$

(B)

greatest error measurement

$$13 \overline{) 0.3846}$$

$$\begin{array}{r} 0.3846 \\ \underline{39} \\ 110 \\ \underline{104} \\ 60 \\ \underline{58} \\ 20 \\ \underline{19} \\ 10 \end{array}$$

(B)

$$\begin{array}{r} 13m \\ \frac{1}{2} \text{ of } 1m \\ .5 \end{array}$$

$$\begin{array}{r} 134 \\ \underline{75} \\ 592 \\ \underline{525} \\ 670 \\ \underline{600} \\ 700 \\ \underline{675} \\ 250 \\ \underline{225} \\ 250 \end{array}$$

$$20) 2km \text{ by } 5km$$

min

$$\begin{array}{r} 1.5 \\ \times 4.5 \\ \hline 75 \\ 600 \\ \hline 6.75 \end{array}$$

(B)

max

$$\begin{array}{r} 2.5 \\ \times 5.5 \\ \hline 125 \\ 1250 \\ \hline 13.75 \end{array}$$

$$21) \frac{\text{success}}{\text{total}}$$

$$\frac{5}{6}$$

(B)

$$22) \frac{8}{960}$$

$$.0083 \dots$$

$$.8\%$$

(B)

$$960 \overline{) 8.0000}$$

$$\begin{array}{r} .0083 \\ \underline{7680} \\ 3200 \\ \underline{2880} \\ 320 \end{array}$$

$$23) 500(2.6\%)$$

$$500(.026)$$

13

(B)

$$\begin{array}{r} .026 \\ \times 500 \\ \hline 0000 \\ 130000 \\ \hline 130000 \end{array}$$

$$24) P(\text{red}) \cdot P(\text{blue})$$

$$\frac{1}{5} \cdot \frac{3}{10} = \frac{3}{50}$$

(D)

$$25) P(\text{orange}) \cdot P(\text{apple after orange})$$

$$\frac{5}{11} \cdot \frac{4}{10} = \frac{2}{11}$$