

ANSWER PRESENTATION TOOL

Green - Student Edition

2

Chapter Test

1-20

ALL EVEN

Show Solutions

ODD

$$1. \frac{9}{16} \times \frac{2}{3} = \frac{9 \times 2}{16 \times 3} = \frac{\overset{3}{\cancel{9}} \times \overset{1}{\cancel{2}}}{\underset{8}{\cancel{16}} \times \underset{1}{\cancel{3}}} = \frac{3}{8}$$

$$2. \frac{1}{10} \times \frac{5}{6} = \frac{1 \times 5}{10 \times 6} = \frac{1 \times \overset{1}{\cancel{5}}}{\underset{2}{\cancel{10}} \times 6} = \frac{1}{12}$$

$$3. 1\frac{3}{7} \times 6\frac{7}{10} = \frac{10}{7} \times \frac{67}{10} = \frac{\overset{1}{\cancel{10}} \times 67}{7 \times \underset{1}{\cancel{10}}} = \frac{67}{7} = 9\frac{4}{7}$$

$$4. \frac{1}{6} \div \frac{1}{3} = \frac{1}{6} \times 3 = \frac{1 \times \overset{1}{\cancel{3}}}{\underset{2}{\cancel{6}}} = \frac{1}{2}$$

$$5. 10 \div \frac{2}{5} = 10 \times \frac{5}{2} = \frac{\overset{5}{\cancel{10}} \times 5}{\underset{1}{\cancel{2}}} = 25$$

$$\begin{aligned}
 \mathbf{6.} \quad 8\frac{3}{4} \div 2\frac{7}{8} &= \frac{35}{4} \div \frac{23}{8} \\
 &= \frac{35}{4} \times \frac{8}{23} \\
 &= \frac{35 \times \cancel{8}^2}{\cancel{4}_1 \times 23} \\
 &= \frac{70}{23} \\
 &= 3\frac{1}{23}
 \end{aligned}$$

$$\begin{array}{r}
 \mathbf{7.} \quad \begin{array}{r} ^1 ^1 \\ 4.92 \\ +3.79 \\ \hline 8.71 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \mathbf{8.} \quad \begin{array}{r} ^1 \\ 5.138 \\ +2.624 \\ \hline 7.762 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \mathbf{9.} \quad \begin{array}{r} ^{12} \\ ^4 ^{\cancel{11}} \\ \cancel{4}.\cancel{4}\cancel{1}6 \\ -1.942 \\ \hline 3.374 \end{array}
 \end{array}$$

10. 6.7

$$\begin{array}{r} \times 8 \\ \hline 53.6 \end{array}$$

$$6.7 \times 8 = 53.6$$

$$\text{Estimate: } 6.7 \times 8 \approx 7 \times 8 = 56$$

$$53.6 \approx 56 \checkmark$$

11. 0.4

$$\begin{array}{r} \times 0.7 \\ \hline 0.28 \end{array}$$

$$0.4 \times 0.7 = 0.28$$

$$\text{Estimate: } 0.4 \times 0.7 \approx \frac{1}{2} \times \frac{1}{2} = \frac{1}{4} = 0.25$$

$$0.28 \approx 0.25 \checkmark$$

12. 7.23

$$\begin{array}{r} \times 4.87 \\ \hline 5061 \\ 5784 \\ 2892 \\ \hline 35.2101 \end{array}$$

$$4.87 \times 7.23 = 35.2101$$

$$\text{Estimate: } 4.87 \times 7.23 \approx 5 \times 7 = 35$$

$$35.2101 \approx 35 \checkmark$$

$$\begin{array}{r} 13. \quad 0.8 \\ 7 \overline{)5.6} \\ \underline{-56} \\ 0 \end{array}$$

$$5.6 \div 7 = 0.8$$

$$\text{Estimate: } 5.6 \div 7 \approx 7 \div 7 = 1$$

$$0.8 \approx 1 \quad \checkmark$$

$$\begin{array}{r} 14. \quad 0.02 \overline{)2.60} \rightarrow 2 \overline{)260} \\ \underline{-2} \\ 06 \\ \underline{-6} \\ 0 \end{array}$$

$$2.6 \div 0.02 = 130$$

$$\text{Estimate: } 2.6 \div 0.02 \approx 3 \div \frac{2}{100} = 150$$

$$130 \approx 150 \quad \checkmark$$

$$\begin{array}{r}
 15. \quad \frac{2.33}{4 \overline{)9.32}} \\
 \underline{-8} \\
 13 \\
 \underline{-12} \\
 12 \\
 \underline{-12} \\
 0
 \end{array}$$

$$9.32 \div 4 = 2.33$$

$$\text{Estimate: } 9.32 \div 4 \approx 8 \div 4 = 2$$

$$2.33 \approx 2 \quad \checkmark$$

$$\begin{array}{r}
 16. \quad \frac{21.84}{0.25 \overline{)5.46}} \rightarrow \frac{21.84}{25 \overline{)546.00}} \\
 \underline{-50} \\
 46 \\
 \underline{-25} \\
 210 \\
 \underline{-200} \\
 100 \\
 \underline{-100} \\
 0
 \end{array}$$

$$5.46 \div 0.25 = 21.84$$

$$\text{Estimate: } 5.46 \div 0.25 \approx 5 \div \frac{1}{4} = 20$$

$$21.84 \approx 20 \quad \checkmark$$

$$\begin{array}{r}
 \mathbf{17. \ 2\text{-pack:}} \quad \frac{12.495}{2)24.990} \\
 \underline{-2} \\
 04 \\
 \underline{-4} \\
 09 \\
 \underline{-8} \\
 19 \\
 \underline{-18} \\
 10 \\
 \underline{-10} \\
 0
 \end{array}
 \qquad
 \begin{array}{r}
 \mathbf{5\text{-pack:}} \quad \frac{11.798}{5)58.990} \\
 \underline{-5} \\
 08 \\
 \underline{-5} \\
 39 \\
 \underline{-35} \\
 49 \\
 \underline{-45} \\
 40 \\
 \underline{-40} \\
 0
 \end{array}$$

The price per DVD for the 2-pack is \$12.50 and \$11.80 for the 5-pack. So, the 5-pack is the better buy.

$$\mathbf{18.} \quad \frac{1}{5} \times 2\frac{1}{2} = \frac{1}{5} \times \frac{5}{2} = \frac{1 \times \overset{1}{\cancel{5}}}{\underset{1}{\cancel{5}} \times 2} = \frac{1}{2}$$

You spend $\frac{1}{2}$ hour writing your blog.

$$\mathbf{19.} \quad \begin{array}{r}
 2.34 \\
 \times 1.99 \\
 \hline
 2106 \\
 2106 \\
 \underline{234} \\
 4.6566
 \end{array}$$

You pay \$4.66 for the grapes.

20. a.

$$0.125 \overline{)0.150} \rightarrow 125 \overline{)150.0}$$

$$\begin{array}{r} 1.2 \\ -125 \\ \hline 250 \\ -250 \\ \hline 0 \end{array}$$

Your camera is 1.2 times faster than your friend's camera.

b. Your camera:

$$0.125 \overline{)2.500} \rightarrow 125 \overline{)2500}$$

$$\begin{array}{r} 20 \\ -2500 \\ \hline 0 \end{array}$$

Your friend's camera:

$$0.15 \overline{)2.50} \rightarrow 15 \overline{)250.00}$$

$$\begin{array}{r} 16.66 \dots \\ -15 \\ \hline 100 \\ -90 \\ \hline 100 \\ -90 \\ \hline 100 \\ -90 \\ \hline 10 \end{array}$$

You can take 20 pictures, and your friend can take 16 pictures.

So, you can take 4 more pictures of the rider.