

SOLUTIONS

$$\textcircled{1} \quad \frac{22}{12} + \frac{17}{6} + \frac{432}{24} + \frac{1}{3}$$

$$\downarrow \quad \downarrow \quad \downarrow \quad \downarrow$$

$$\frac{11}{6} + \frac{17}{6} + \frac{108}{6} + \frac{2}{6} =$$

$$\frac{138}{6} = 23 \quad \textcircled{B}$$

$\textcircled{9}$ perimeter

$$4 + 4 + 6 + 6 = 20$$

$$\text{area} \quad 4 \times 6 = \frac{+ 24}{44} \quad \textcircled{C}$$

$$\textcircled{2} \quad 250 \quad \textcircled{B}$$

$$\begin{array}{r} \times .05 \\ 12.50 \end{array}$$

$$\textcircled{10} \quad 526 \quad \textcircled{C}$$

$$\begin{array}{r} \times 4 \\ 2104 \end{array}$$

$\textcircled{3} \quad \textcircled{D}$

$\textcircled{11}$ Houston 9:00 pm
Tally 10:00 pm

$\textcircled{4} \quad \textcircled{D}$

+ 12 hours

10:00 am

$$\textcircled{5} \quad 2 + 2 + 3 + 4 + 9 = 20$$

$$20 \div 5 = 4 \quad \textcircled{A}$$

+ 2 hours
noon \textcircled{D}

$\textcircled{6} \quad 2, 2, \textcircled{3}, 4, 9 \quad \textcircled{B} \quad \textcircled{12} \quad \textcircled{A}$

$\textcircled{7} \quad 2 \quad \textcircled{A}$

$$\textcircled{13} \quad \textcircled{15 \cdot 15} \quad \text{area} = \pi r^2$$

$$= \pi (15)^2$$

$$= 225\pi \quad \textcircled{C}$$

$\textcircled{8} \quad 18 \quad \textcircled{D}$

$$\begin{array}{r} \times 2.5 \\ 90 \\ 360 \\ \hline 45.0 \end{array}$$

$\textcircled{14} \quad 1:99 \quad \textcircled{B}$

$$\textcircled{15} \quad 10 \text{ u.s.} = 20.00 \text{ B.D.}$$

$$+ 5.28 \text{ B.D.}$$

$$\hline 14.72 \text{ B.D.} = 7.36 \text{ u.s.}$$

\textcircled{B}

(16)
$$\begin{array}{r} 16 \text{ r } 11 \text{ (B)} \\ 32 \overline{) 523} \\ \underline{- 32} \\ 203 \\ \underline{- 192} \\ 11 \end{array}$$

(21) $1+2+3+4+5+6+7+8+9+10 = 55 \text{ ft.}$
(D)

(22) enchilada $3.22 \times 3 = 9.66$
quesadilla $4.04 \times 4 = 16.16$
burrito $5.67 \times 2 = 11.34$
 $\underline{37.16}$

(17) 1, 1, 2, 3, 5, 8, 13, 21
 $1+1=2, 1+2=3, 3+5=8,$
 $5+8=13, 8+13=21$
 $3+13+21=37$ (D)

$$\begin{array}{r} 50.00 \\ \underline{- 37.16} \\ \$ 12.84 \end{array}$$
 (B)

(18) $\frac{500 \text{ ft.}}{30 \text{ sec.}}$ (C)

(23) prime numbers to 100
2, 3, 5, 7, 11, 13, 17, 19, 23,
29, 31, 37, 41, 43, 47, 53,
59, 61, 67, 71, 73, 79, 83,
89, 97 \rightarrow 25 primes
 $100 - 25 = 75$ (D)

(19)
$$\begin{array}{r} 723 \\ + 228 \\ \hline 951 \end{array}$$
 (C)

(20) 5 min 30 sec = 5.5 min. (24) 18: 18, 36, 54, 72, 90
4.72 (B)
$$\begin{array}{r} 5.5 \overline{) 26.000} \\ \underline{- 220} \downarrow \\ 400 \\ \underline{- 385} \downarrow \\ 150 \\ \underline{- 110} \\ 40 \end{array}$$

36: 36, 72, 108
72: 72, 144 (D)

$$(25) \quad \frac{1}{4} \times \frac{1}{3} = \frac{1}{12}$$

Still in line

$$\frac{1}{3} + \frac{1}{3} + \frac{1}{12}$$

$$\downarrow \quad \downarrow \quad \downarrow$$

$$\frac{4}{12} + \frac{4}{12} + \frac{1}{12} = \frac{9}{12} = \frac{3}{4}$$

$\frac{3}{4}$ of an hour is

45 minutes (A)

$$(26) \quad |(-4)^2 \times (4)^2| =$$

$$|16 \times 16| = |256|$$

$$= 256 \quad (D)$$

(27) (E) maple leaf

$$(28) \quad \frac{1815}{5280} = \frac{11}{32} \quad (B)$$

$$(29) \quad 200 \text{ km/liter} \times 12 \text{ liters} =$$

2400 km. range. One way

is 2000 km. Boat will

make it 400 km. back.

(A)

(30) (A)