

28D

- 1) $2:15 + 12:00 = 14:15$
- 2) 0820
- 3) 5:45 AM
- 4) $1902 - 12:00 = 7:02 \text{ PM}$
- 5)
$$\begin{array}{r} 0153 \\ + 0050 \\ \hline 0243 \end{array}$$
- 6)
$$\begin{array}{r} 0642 \\ + 0310 \\ \hline 0952 \end{array}$$
- 7)
$$\begin{array}{r} 1836 + 20 = 1856 \\ - 1140 + 20 = 1200 \\ \hline 0656 \end{array}$$
- 8)
$$\begin{array}{r} 2215 + 22 = 2237 \\ - 1038 + 22 = 1100 \\ \hline 1137 \end{array}$$
- 9) $V = 1/3(6.5)(7)(7) = 106.17 \text{ cu. in.}$
- 10) $V = 1/3(3.14)(4^2)(5.4) = 90.432 \text{ cu. in.}$
- 11) $V = 3.14(3^2)(10) = 282.6 \text{ cu. ft.}$
- 12) $2X^2 + 7X + 6$
- 13) $X^2 + 6X + 8$
- 14) $2X^2 + 6X$
- 15) $\frac{5}{100} = \frac{1}{20}$
- 16) $\frac{50 + 45}{100} = \frac{95}{100} = \frac{19}{20}$
- 17) $8 = 2 \times 2 \times 2$; $3 = 1 \times 3$
LCM = $2 \times 2 \times 2 \times 3 = 24$
- 18) $1.50 \times 6 = 9 \text{ ft. tall now}$
 $9 - 6 = 3 \text{ ft. of growth}$

28E

- 1) 1205
- 2) 0135
- 3) $2305 - 12 = 11:05 \text{ PM}$
- 4) 3:16 AM
- 5)
$$\begin{array}{r} 1 \\ 0153 \\ + 0050 \\ \hline 0243 \end{array}$$
- 6)
$$\begin{array}{r} 0642 \\ + 0310 \\ \hline 0952 \end{array}$$
- 7)
$$\begin{array}{r} 2419 + 15 = 2434 \\ - 0645 + 15 = 0700 \\ \hline 1734 \end{array}$$
- 8)
$$\begin{array}{r} 1052 + 05 = 1057 \\ - 0855 + 05 = 0900 \\ \hline 0157 \end{array}$$
- 9) $V = 1/3(1.5)(1.5)(3) = 2.25 \text{ cu. in.}$
- 10) $V = 1/3(3.14)(10^2)(15) = 1,570 \text{ cu. in.}$
- 11) $V = 3.14(4^2)(6.5) = 326.56 \text{ cu. ft.}$
- 12) $2X^2 + 12X + 16$
- 13) $X^2 + 7X + 6$
- 14) $4X^2 + 12X + 5$
- 15) $1345 - 12:00 = 1:45 \text{ PM}$
- 16) $1345 + 0115 = 1500$
 $1500 - 12:00 = 3:00 \text{ PM}$
- 17) mean: $5 + 6 + 7 + 7 + 10 = 35$
 $35 \div 5 = 7$
median = 7
mode = 7
- 18) $\frac{2}{350} = \frac{1}{175}$
- 19) $\frac{5}{350} = \frac{1}{70}$
- 20) $150^\circ (9/5) = 270$
 $270 + 32 = 302^\circ$

28F

- 1) $6:18 + 12:00 = 18:18$
- 2) 1020
- 3) 12:16 AM
- 4) $1530 - 12:00 = 3:30 \text{ PM}$
- 5)
$$\begin{array}{r} 1 \\ 1018 \\ + 0350 \\ \hline 1408 \end{array}$$
- 6)
$$\begin{array}{r} 11 \\ 1045 \\ + 1045 \\ \hline 2130 \end{array}$$
- 7)
$$\begin{array}{r} 1825 + 22 = 1847 \\ - 0238 + 22 = 0300 \\ \hline 1547 \end{array}$$
- 8)
$$\begin{array}{r} 0921 + 23 = 0944 \\ - 0637 + 23 = 0700 \\ \hline 0244 \end{array}$$
- 9) $V = 1/3(8)(8)(9.3) = 198.4 \text{ cu. in.}$
- 10) $V = 1/3(3.14)(1^2)(3.6) = .04 \text{ cu. yd.}$
- 11) $V = 3.14(2^2)(8.3) = 104.25 \text{ cu. ft.}$
- 12) $X^2 + 7X + 10$
- 13) $3X^2 + 10X + 3$
- 14) $X^2 + 7X + 12$
- 15) $\frac{10}{100} = \frac{1}{10}$
- 16) $24 = 2 \times 2 \times 2 \times 3$; $36 = 2 \times 2 \times 3 \times 3$
GCF = $2 \times 2 \times 3 = 12$
- 17) 80
- 18) 0000 is midnight: it was dark
- 19) obtuse
- 20) $\frac{165}{515} = \frac{33}{103} = 33 \div 103 = .320$

TWO TH

29A

- 1) done
- 2)
$$\begin{array}{r} 5 \text{ yd. } 2 \text{ ft.} \\ + 2 \text{ yd. } 2 \text{ ft.} \\ \hline 7 \text{ yd. } 4 \text{ ft.} = 8 \text{ yd. } 1 \text{ ft.} \end{array}$$
- 3)
$$\begin{array}{r} 4 \text{ lb. } 10 \text{ oz.} \\ + 1 \text{ lb. } 8 \text{ oz.} \\ \hline 5 \text{ lb. } 18 \text{ oz.} = 6 \text{ lb. } 2 \text{ oz.} \end{array}$$
- 4) done
- 5)
$$\begin{array}{r} 8 \text{ yd. } 1 \text{ ft.} \rightarrow 7 \text{ yd. } 4 \text{ ft.} \\ - 3 \text{ yd. } 2 \text{ ft.} \quad - 3 \text{ yd. } 2 \text{ ft.} \\ \hline 4 \text{ yd. } 2 \text{ ft.} \end{array}$$
- 6)
$$\begin{array}{r} 9 \text{ lb. } 5 \text{ oz.} \rightarrow 8 \text{ lb. } 21 \text{ oz.} \\ - 4 \text{ lb. } 7 \text{ oz.} \quad - 4 \text{ lb. } 7 \text{ oz.} \\ \hline 4 \text{ lb. } 14 \text{ oz.} \end{array}$$
- 7) done
- 8)
$$\begin{array}{r} 9 \text{ yd. } 1 \text{ ft.} + 1 \text{ ft.} = 9 \text{ yd. } 2 \text{ ft.} \\ - 4 \text{ yd. } 2 \text{ ft.} + 1 \text{ ft.} = 5 \text{ yd. } 0 \text{ ft.} \\ \hline 4 \text{ yd. } 2 \text{ ft.} \end{array}$$
- 9)
$$\begin{array}{r} 14 \text{ lb. } 9 \text{ oz.} + 4 \text{ oz.} = 14 \text{ lb. } 13 \text{ oz.} \\ - 10 \text{ lb. } 12 \text{ oz.} + 4 \text{ oz.} = 11 \text{ lb. } 0 \text{ oz.} \\ \hline 3 \text{ lb. } 13 \text{ oz.} \end{array}$$
- 10)
$$\begin{array}{r} 7' 5'' + 6'' = 7' 11'' \\ - 2' 6'' + 6'' = 3' 0'' \\ \hline 4' 11'' \end{array}$$
- 11)
$$\begin{array}{r} 10 \text{ yd. } 2 \text{ ft.} \\ - 8 \text{ yd. } 2 \text{ ft.} \\ \hline 2 \text{ yd. } 0 \text{ ft.} \end{array}$$
- 12)
$$\begin{array}{r} 6 \text{ lb. } 1 \text{ oz.} + 14 \text{ oz.} = 6 \text{ lb. } 15 \text{ oz.} \\ - 2 \text{ lb. } 2 \text{ oz.} + 14 \text{ oz.} = 3 \text{ lb. } 0 \text{ oz.} \\ \hline 3 \text{ lb. } 15 \text{ oz.} \end{array}$$
- 13) $7' 6'' - 5' 11'' = 7' 7'' - 6' = 1' 7''$
- 14) $3' 8'' + 1' 4'' = 4' 12'' = 5'$
- 15)
$$\begin{array}{r} 7 \text{ lbs. } 5 \text{ oz.} + 9 \text{ lbs. } 12 \text{ oz.} = \\ 16 \text{ lbs. } 17 \text{ oz.} = 17 \text{ lbs. } 1 \text{ oz.} \end{array}$$

29B

- 1) $5' 11''$
 $+ \underline{1' 4''}$
 $6' 15'' = 7' 3''$
- 2) $10 \text{ yd. } 1 \text{ ft.}$
 $+ \underline{6 \text{ yd. } 1 \text{ ft.}}$
 $16 \text{ yd. } 2 \text{ ft.}$
- 3) $7 \text{ lb. } 12 \text{ oz.}$
 $+ \underline{8 \text{ lb. } 5 \text{ oz.}}$
 $15 \text{ lb. } 17 \text{ oz.} = 16 \text{ lb. } 1 \text{ oz.}$
- 4) $13' 2'' \rightarrow 12' 14''$
 $- \underline{8' 5''} \quad - \underline{8' 5''}$
 $4' 9''$
- 5) $7 \text{ yd. } 0 \text{ ft.} \rightarrow 6 \text{ yd. } 3 \text{ ft.}$
 $- \underline{2 \text{ yd. } 1 \text{ ft.}} \quad - \underline{2 \text{ yd. } 1 \text{ ft.}}$
 $4 \text{ yd. } 2 \text{ ft.}$
- 6) $18 \text{ lb. } 3 \text{ oz.} \rightarrow 17 \text{ lb. } 19 \text{ oz.}$
 $- \underline{16 \text{ lb. } 4 \text{ oz.}} \quad - \underline{16 \text{ lb. } 4 \text{ oz.}}$
 $1 \text{ lb. } 15 \text{ oz.}$
- 7) $20' 3'' + 4'' = 20' 7''$
 $- \underline{17' 8'' + 4'' = 18' 0''}$
 $2' 7''$
- 8) $4 \text{ yd. } 2 \text{ ft.}$
 $- \underline{1 \text{ yd. } 2 \text{ ft.}}$
 $3 \text{ yd. } 0 \text{ ft.}$
- 9) $9 \text{ lb. } 11 \text{ oz.} + 1 \text{ oz.} = 9 \text{ lb. } 12 \text{ oz.}$
 $- \underline{6 \text{ lb. } 15 \text{ oz.} + 1 \text{ oz.} = 7 \text{ lb. } 0 \text{ oz.}}$
 $2 \text{ lb. } 12 \text{ oz.}$
- 10) $14' 2'' + 7'' = 14' 9''$
 $- \underline{3' 5'' + 7'' = 4' 0''}$
 $10' 9''$
- 11) $7 \text{ yd. } 2 \text{ ft.}$
 $- \underline{4 \text{ yd. } 1 \text{ ft.}}$
 $3 \text{ yd. } 1 \text{ ft.}$
- 12) $33 \text{ lb. } 8 \text{ oz.} + 7 \text{ oz.} = 33 \text{ lb. } 15 \text{ oz.}$
 $- \underline{21 \text{ lb. } 9 \text{ oz.} + 7 \text{ oz.} = 22 \text{ lb. } 0 \text{ oz.}}$
 $11 \text{ lb. } 15 \text{ oz.}$
- 13) $5 \text{ lbs. } 8 \text{ oz.} + 9 \text{ lbs. } 8 \text{ oz.} =$
 $14 \text{ lbs. } 16 \text{ oz.} = 15 \text{ lbs.}$
- 14) $14 \text{ lbs. } 16 \text{ oz.} - 2 \text{ lbs. } 4 \text{ oz.} =$
 $12 \text{ lbs. } 12 \text{ oz.}$
- 15) $15 \text{ yds.} - 2 \text{ ft.} = 14 \text{ yds. } 1 \text{ ft.}$

29C

- 1) $8' 6''$
 $+ \underline{6' 6''}$
 $14' 12'' = 15'$
- 2) $14 \text{ yd. } 3 \text{ ft.}$
 $+ \underline{9 \text{ yd. } 3 \text{ ft.}}$
 $23 \text{ yd. } 6 \text{ ft.} = 25 \text{ yd.}$
- 3) $5 \text{ lb. } 2 \text{ oz.}$
 $+ \underline{5 \text{ lb. } 8 \text{ oz.}}$
 $10 \text{ lb. } 10 \text{ oz.}$
- 4) $10' 8'' \rightarrow 9' 20''$
 $- \underline{4' 11''} \quad - \underline{4' 11''}$
 $5' 9''$
- 5) $23 \text{ yd. } 0 \text{ ft.} \rightarrow 22 \text{ yd. } 3 \text{ ft.}$
 $- \underline{16 \text{ yd. } 2 \text{ ft.}} \quad - \underline{16 \text{ yd. } 2 \text{ ft.}}$
 $6 \text{ yd. } 1 \text{ ft.}$
- 6) $7 \text{ lb. } 3 \text{ oz.} \rightarrow 6 \text{ lb. } 19 \text{ oz.}$
 $- \underline{5 \text{ lb. } 15 \text{ oz.}} \quad - \underline{5 \text{ lb. } 15 \text{ oz.}}$
 $1 \text{ lb. } 4 \text{ oz.}$
- 7) $16' 7''$
 $- \underline{8' 3''}$
 $8' 4''$
- 8) $7 \text{ yd. } 1 \text{ ft.} + 1 \text{ ft.} = 7 \text{ yd. } 2 \text{ ft.}$
 $- \underline{2 \text{ yd. } 2 \text{ ft.} + 1 \text{ ft.} = 3 \text{ yd. } 0 \text{ ft.}}$
 $4 \text{ yd. } 2 \text{ ft.}$
- 9) $15 \text{ lb. } 2 \text{ oz.} + 13 \text{ oz.} = 15 \text{ lb. } 15 \text{ oz.}$
 $- \underline{11 \text{ lb. } 3 \text{ oz.} + 13 \text{ oz.} = 12 \text{ lb. } 0 \text{ oz.}}$
 $3 \text{ lb. } 15 \text{ oz.}$
- 10) $31' 0'' + 9'' = 31' 9''$
 $- \underline{20' 3'' + 9'' = 21' 0''}$
 $10' 9''$
- 11) $42 \text{ yd. } 1 \text{ ft.} + 1 \text{ ft.} = 42 \text{ yd. } 2 \text{ ft.}$
 $- \underline{17 \text{ yd. } 2 \text{ ft.} + 1 \text{ ft.} = 18 \text{ yd. } 0 \text{ ft.}}$
 $24 \text{ yd. } 2 \text{ ft.}$
- 12) $12 \text{ lb. } 10 \text{ oz.}$
 $- \underline{7 \text{ lb. } 8 \text{ oz.}}$
 $5 \text{ lb. } 2 \text{ oz.}$
- 13) $5' 4'' - 4' 11'' = 5' 5'' - 5' = 5''$
- 14) $69 \text{ lbs. } 16 \text{ oz.} - 36 \text{ lbs. } 5 \text{ oz.} =$
 $33 \text{ lbs. } 11 \text{ oz.}$
- 15) $6 \text{ yds. } 36 \text{ in.} - 5 \text{ yds. } 6 \text{ in.} = 1 \text{ yd. } 30 \text{ in.}$
 $\text{or } 1 \text{ yd. } 2 \text{ ft. } 6 \text{ in.}$

