

Calculator Test 4
2010 - 2011

11. $(27.99 + 22.49 + 32.57)(1.0825) = \89.90

12. $\frac{595 \text{ miles}}{379 \text{ miles}} \times 11 = 17.3$

13. $\left(\frac{1}{10}\right)(.13)(.42)(\pi) = .0172$

24. $A = LW$
 $= (450.2)\left(\frac{450.2}{3.5}\right)$
 $= 57900$

25. $8x - \sqrt{18} = 2250$
 $8x = 2250 + \sqrt{18}$
 $x = \frac{2250 + \sqrt{18}}{8}$
 $x = 282$

26. $2:6:9 = \frac{2}{17} : \frac{6}{17} : \frac{9}{17}$
Therefore,
 $\left(\frac{2}{17}\right)(760.8) = 89.5$

35. $\frac{\left[\left(\frac{21.8 \text{ ft}}{1}\right)\left(\frac{12 \text{ in}}{1 \text{ ft}}\right)\right]^3}{231 \text{ cubic inches / gal}} = 77500 \text{ gal}$

36. $1\frac{8}{9} = \frac{17}{9}$
opposite multiplicative inverse = $-\frac{9}{17}$
 $-\frac{9}{17} = -.529$

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37. $A = \pi r^2$
 $r = \sqrt{\frac{A}{\pi}}$
 $r = \sqrt{\frac{34789}{\pi}}$
 $r = 105$

38. $\frac{x}{38} = \frac{15.8}{19 + 38}$
 $57x = (38)(15.8)$
 $x = \frac{(38)(15.8)}{57}$
 $x = 10.5$

47. $x + (x + 2.5) = 19$
 $2x + 2.5 = 19$
 $2x = 19 - 2.5$
 $x = \frac{19 - 2.5}{2}$
 $x = 8.25$

48. $(2050)(144) = 295000$

49. $P = (22.5) + (30.9) + \sqrt{30.9^2 - 22.5^2}$
 $= 74.6$

50. $\sin \theta = \frac{\text{Opposite}}{\text{Hypotenuse}}$
 $\frac{\sin 27^\circ}{1} = \frac{.022}{x}$
 $x = \frac{.022}{\sin 27^\circ}$
 $x = .0485$

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59. A = final amount
P = principal amount (initial investment)
r = annual interest rate
n = number of times the interest is compounded per year
t = number of years

$$A = P \left(1 + \frac{r}{n} \right)^t$$
$$A = 5000(1 + .0425)^{18}$$
$$A = \$10576.43$$

60.

$$h = \frac{s}{2} \sqrt{3}$$
$$= \frac{45.8}{2} \sqrt{3}$$
$$= 39.7$$

61.

$$A = (25)(20) + (10)(15) + (5)(20)$$
$$= 750$$

62.

$$V = \frac{Bh}{3}$$
$$= \frac{\pi r^2 h}{3}$$
$$= \frac{\pi (11)^2 (31)}{3}$$
$$= 3930$$

71.

$$A = \frac{C^2}{4\pi}$$

Use calculator conversion key to change cm to in

$$A = \frac{(15 \text{ in})^2}{4\pi}$$
$$A = 17.9$$

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72.

$$\frac{d}{t^2}$$
$$\frac{984}{19^2} = \frac{x}{60^2}$$
$$x = \frac{(984)(60^2)}{19^2}$$
$$x = 9810$$

73.

$$A = \pi r^2$$
$$= \frac{309}{360}(\pi)(18.2)^2$$
$$= 893$$

74.

$$A = 6(h^2 \tan 30^\circ)$$
$$= 6[(9.81^2)(\tan 30^\circ)]$$
$$= 333$$