

- 1:  $507 + 154 + 250$  ----- 1=\_\_\_\_\_
- 2:  $801 - 566 + 739$  ----- 2=\_\_\_\_\_
- 3:  $401 + 216 - 514$  ----- 3=\_\_\_\_\_
- 4:  $671 + 344 - 419 + 708$  ----- 4=\_\_\_\_\_
- 5:  $907 + 106 - 280 + 573$  ----- 5=\_\_\_\_\_
- 6:  $5.61 - 0.0886 + 0.591$  ----- 6=\_\_\_\_\_
- 7:  $8.87 - 76.8 - 14.9 - 0.506$  ----- 7=\_\_\_\_\_
- 8:  $0.0344 - 0.00641 + 0.0959 + 0.579 - 0.36$  ----- 8=\_\_\_\_\_
- 9:  $70.5 \times 80.2 / 29.8$  ----- 9=\_\_\_\_\_
- 10:  $52.2 \times 2.43 \times 46.8 \times \pi$  ----- 10=\_\_\_\_\_
- 11: What is the absolute difference between 5.75 and the square of 0.72? ----- 11=\_\_\_\_\_
- 12: Toy cars are 3.6 inches long. How long is a line of 29 toy cars placed back-to-back? ----- 12=\_\_\_\_\_ in
- 13: What is the remainder when 8469 is divided by 35? ----- 13=\_\_\_\_\_ (integer)

14:  $(5680 + 52.3 - 994) \times (50.4)$  ----- 14=\_\_\_\_\_

15:  $(0.386 \times 0.00678) + (0.0464 \times 0.00219)$  ----- 15=\_\_\_\_\_

16:  $(3.42 + 58.1) + (5.9 + 0.134 - 7.4)$  ----- 16=\_\_\_\_\_

17:  $(0.89 + 0.0074) \times (0.00487 - 0.00651 + 0.00121)$  ----- 17=\_\_\_\_\_

18:  $\left[ \frac{39000 - 91000}{41400} \right] - 6.76$  ----- 18=\_\_\_\_\_

19:  $\frac{(0.433 + 1.73) \times (0.966)}{3.22} + 21.4$  ----- 19=\_\_\_\_\_

20:  $\frac{(281) / (35.9)}{(2240) / (137)} - \frac{8860}{79.3}$  ----- 20=\_\_\_\_\_

21:  $\left[ \frac{(-0.733 - 48.6)(-16.6 + 0.714)}{1.81 + 6.96} \right] - (6.96)$  ----- 21=\_\_\_\_\_

22:  $\left\{ \frac{6940}{99.4 + 394} \right\} + \left\{ \frac{89.9}{-20.4 + 8430} \right\}$  ----- 22=\_\_\_\_\_

23:  $\frac{(3.94 - 0.458) / (-0.187 + 2.57)}{0.193 + 0.844} - \left\{ \frac{0.0111}{0.049 + 0.0387} \right\}$  ----- 23=\_\_\_\_\_

24: When a rider is in the top car of a Ferris wheel, he is 38 feet in the air. When he is in the bottom car, he is 4 feet in the air. What is the radius of the Ferris wheel? 24=\_\_\_\_\_ ft

25: An airplane took off from Austin at 2:34PM and landed in Dallas at 3:47PM. The distance from Austin to Dallas is 195 miles. What was the plane's average speed? ----- 25=\_\_\_\_\_ mph

26: A frog leaps forward  $3\frac{1}{2}$ " every  $2\frac{1}{2}$  seconds. How far can the frog go in 2 minutes? ----- 26=\_\_\_\_\_ yd

27:  $(4.74 \times 10^2) - (8.84 \times 10^3) - (2.14 \times 10^3)$  ----- 27=\_\_\_\_\_

28:  $\left[ \frac{2.55 \times 10^{-1}}{8.13 \times 10^{-3}} \right] + \frac{(0.0604) + (0.991 - 0.00155)}{(0.00479 + 0.0585)(0.236)}$  ----- 28=\_\_\_\_\_

29:  $(2.69 \times 10^{-6}) \times \left\{ \frac{(47.8) - (-79.8)(828)(93.8)}{(7.88 \times 10^{-2})} \right\}$  ----- 29=\_\_\_\_\_

30:  $\frac{1}{4.07} - \frac{1}{4.86} - \frac{45800}{27900}$  ----- 30=\_\_\_\_\_

31:  $\left[ \frac{1}{0.00332 - 0.667} \right] \left[ \frac{1}{0.965 - 0.281} \right] + (6.98 \times 10^{-3})$  ----- 31=\_\_\_\_\_

32:  $\left( \frac{0.828 + 0.0354}{0.0461} \right) - \left( \frac{-0.0629 + 0.00821}{0.0461} \right) + \left( \frac{1}{0.0461} \right)$  ----- 32=\_\_\_\_\_

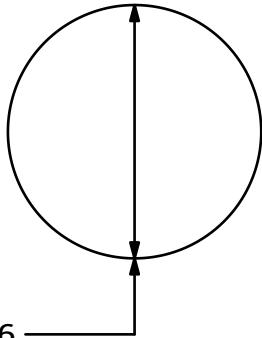
33:  $\left( \frac{3.67 - \pi}{0.182 - 38.4} \right) \left( \frac{1}{68.2 - 0.427 + 0.127} \right)$  ----- 33=\_\_\_\_\_

34:  $(-8.62)(-2.44)(0.0347)(0.576 - \pi)$  ----- 34=\_\_\_\_\_

35: Rachel averaged 94.8 on her first five assignments and averaged 88.0 on her last 3 assignments. What is her overall average? ----- 35=\_\_\_\_\_

36: It was estimated that 42,000 attended a football game. Actual ticket sales indicate there were 46,783 attendees. What is the percent error in the attendance estimate? ----- 36=\_\_\_\_\_ %

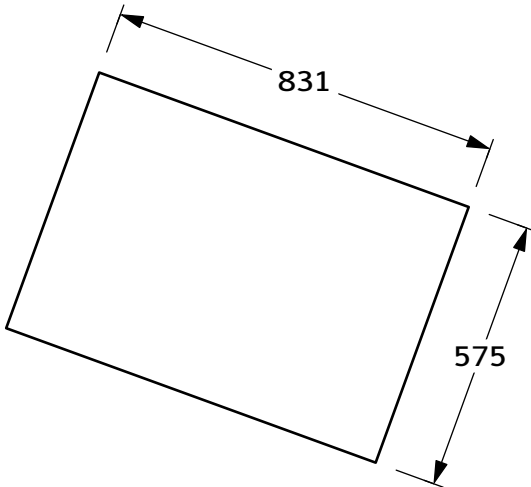
37. CIRCLE



Area = ?

37. \_\_\_\_\_

38. RECTANGLE



Perimeter = ?

38. \_\_\_\_\_

39:  $(-0.266)^2 + (-5.07)^2 + (0.0611 - 0.0385) / (7.73)$  ----- 39=\_\_\_\_\_

40:  $\left(\frac{-0.057}{0.593}\right)^2 / \left(\frac{0.344}{-0.233}\right)^2 - (0.551 + 0.856)$  ----- 40=\_\_\_\_\_

41:  $\frac{(1/7.24) + (1/34.4) + (1/90.7)}{(1/8.75)^2}$  ----- 41=\_\_\_\_\_

42:  $\sqrt{0.396 + 7.35} + \sqrt{0.874 + 0.0213 - 0.0655}$  ----- 42=\_\_\_\_\_

43:  $\frac{87.7 + 4.17}{\sqrt{5.31 \times 10^{-10}}} + \frac{33.1 - 5.8}{\sqrt{6.64 \times 10^{-8}}}$  ----- 43=\_\_\_\_\_

44:  $(\sqrt{272})(\sqrt{8830 - 4340})(\sqrt{88.9 / 4070})$  ----- 44=\_\_\_\_\_

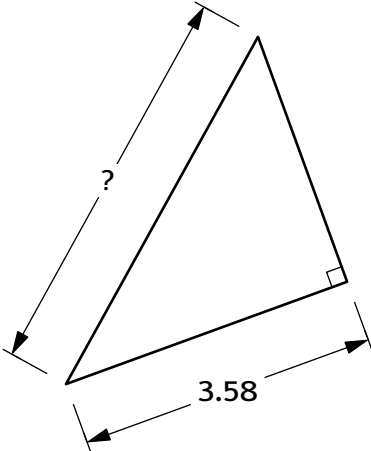
45:  $\sqrt{\frac{(5.54 \times 10^{-6}) + (9.73 \times 10^{-6})}{8.51}} + \frac{1}{(9.93)(0.941)}$  ----- 45=\_\_\_\_\_

46:  $34.3\sqrt{69.4 + 77.3} - 5.3\sqrt{12.7 + 325}$  ----- 46=\_\_\_\_\_

47: Water is released from a dam at  $26.8 \text{ ft}^3/\text{s}$ . How long will it take to fill a 12-ft diameter pipe 0.36 mi long? ----- 47=\_\_\_\_\_ min

48: Alyssa walks 37.8 ft north and 49.7 ft west. How far is she from the point where she started? ----- 48=\_\_\_\_\_ ft

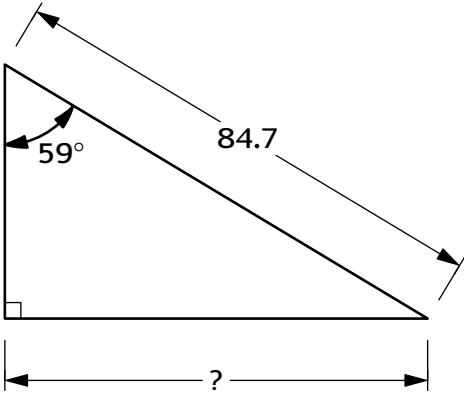
49. RIGHT TRIANGLE



Area = 7.36

49. \_\_\_\_\_

50. RIGHT TRIANGLE



50. \_\_\_\_\_

51:  $\sqrt{\pi + (2920)(8530) + (36.6)(6520)}$  ----- 51=\_\_\_\_\_

52:  $\left(\frac{829}{91.8}\right)^3 \times \sqrt{\frac{(964)}{(7.06 \times 10^{-1}) + (7.76 \times 10^0)}}$  ----- 52=\_\_\_\_\_

53:  $\sqrt{1.91 + 0.619} - \frac{1}{(3.11 \times 10^2)} + (0.723)(0.969)^2$  ----- 53=\_\_\_\_\_

54:  $\sqrt[3]{(9.28 \times 10^{-7})} / \left[ \frac{6250 - 969}{352 - \pi} - (3.57) \right]$  ----- 54=\_\_\_\_\_

55:  $\left(\frac{0.003}{-0.6}\right)\left(\frac{-0.0763}{0.0635}\right)\left(\frac{0.217 + 0.0294}{-0.00792 + 1/0.00171}\right)$  ----- 55=\_\_\_\_\_

56:  $(3970)^{0.419} - \left[ \frac{3490 + 711 + 5680}{7780 - 7760} \right]$  ----- 56=\_\_\_\_\_

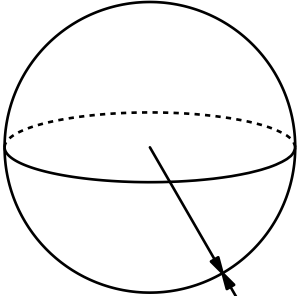
57:  $\left[ \sqrt{\sqrt{0.791 + 0.542}} \right] - \left[ \sqrt{\sqrt{0.0276 + 0.0293}} \right]$  ----- 57=\_\_\_\_\_

58:  $(0.945)^4 \times (0.945)^6 \times (0.945)^8 \times (0.945)^5$  ----- 58=\_\_\_\_\_

59: The geometric mean of 3 numbers is the cube root of their product. The geometric mean of a number, twice the number, and 16 is 11.4. What is the number? [Answer with a positive number.] ----- 59=\_\_\_\_\_

60: A password system requires exactly 4 characters. There are 33 characters to choose from, but no character can be used more than once. How many different passwords are possible? ----- 60=\_\_\_\_\_ (integer)

61. **SPHERE**

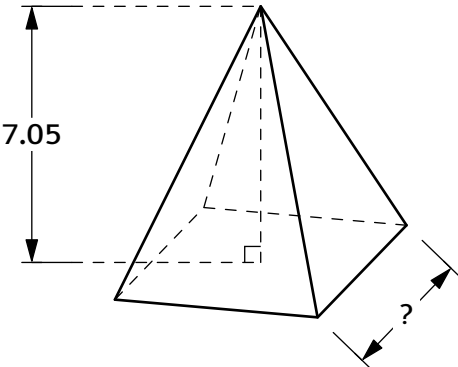


R = 0.835

Volume = ?

61. \_\_\_\_\_

62. **SQUARE-BASED PYRAMID**



Volume = 73.7

62. \_\_\_\_\_

63:  $e^{(0.257)} - \frac{\sqrt{633000}}{2970 - 46200}$  ----- 63=\_\_\_\_\_

64:  $e^{(0.599)} - e^{(0.32)} + (0.53)^{(0.419)}$  ----- 64=\_\_\_\_\_

65: (deg)  $\sin(326^\circ) + \tan(12^\circ) + (0.524)(0.423)$  ----- 65=\_\_\_\_\_

66: (rad)  $(352)\tan(4.95) + (9150)\tan(2.16) - \frac{55200}{5.41}$  ----- 66=\_\_\_\_\_

67: (rad)  $\frac{(0.932)\sin(6.08)}{(0.616)\sin(3.9)} - \sqrt{\frac{6030 + 8710}{432}}$  ----- 67=\_\_\_\_\_

68:  $\left\{ \frac{e^{(0.673 - 0.636 + 0.372)}}{e^{(0.43 + 0.672)}} \right\} \times e^{0.657}$  ----- 68=\_\_\_\_\_

69: (rad)  $\left[ \sqrt{\frac{349 + 7140 - (3810)}{33.2 - 32.5 + (58.1)}} \right]^2 + \frac{\sin(0.55)}{\cos(0.55)}$  ----- 69=\_\_\_\_\_

70:  $(0.0215 - 0.0955 + (0.561)(2.91))^{1/2} / \left\{ \frac{2.81 \times 10^{-4}}{9.01 \times 10^{-4}} \right\}$  ----- 70=\_\_\_\_\_

71: An airplane has a 3600-ft long runway available for take-off. It begins its takeoff from rest and uses 26.8 seconds to reach lift-off. Assuming a constant acceleration and that the plane used 84% of the available runway, what was the plane's acceleration rate? ----- 71=\_\_\_\_\_ ft/s<sup>2</sup>

72: Ohm's Law states that voltage  $V$  (in volts) is the product of the current  $I$  (in amps) and the resistance  $R$  (in ohms). The power used  $P$  (in watts, W) is the product of the current and the voltage. How much power is used in a circuit with resistance 5.6 ohms with a battery that provides 12 volts? [1 watt = 1 amp · 1 volt] ----- 72=\_\_\_\_\_ W

73. SIMILAR RECTANGLES

73. \_\_\_\_\_

74. CONGRUENT CIRCLES

Hatched Area = ?

74. \_\_\_\_\_

75:  $1 - 0.264 + \frac{(0.264)^2}{2} - \frac{(0.264)^3}{6} + \frac{(0.264)^4}{24}$  ----- 75=\_\_\_\_\_

76: (deg)  $[\sin^2(354^\circ) - \cos^2(354^\circ)] \times [e^{(0.236 + 0.507)}]$  ----- 76=\_\_\_\_\_

77:  $\frac{\text{Log}[70500 + 4550 + 33100 + 232000]}{\text{Log}[(9.36 \times 10^{-10}) + (3.18 \times 10^{-9})]} - \sqrt{0.00710}$  ----- 77=\_\_\_\_\_

78:  $\text{Ln} \left[ \left( \frac{8.03 \times 10^{-8} + 6.21 \times 10^{-8}}{6.26 \times 10^{-6}} \right)^4 \right]$  ----- 78=\_\_\_\_\_

79:  $\frac{1}{2} \text{Log} \left( \frac{96.9 - 73.5}{\pi} \right) - \text{Log} \sqrt{\frac{[6.82 \times 10^{-3}] - [6.98 \times 10^{-5}]}{[1.48 \times 10^{-5}]}}$  ----- 79=\_\_\_\_\_

80:  $63 + 84 + 105 + 126 + \dots + 714$  ----- 80=\_\_\_\_\_