Answers

≈ means approximately equal to.
Answers are in plain type.
Explanations are in Italics.

1 B.

2 E.

3 B.

4 $16

5 B. *9 x 365 ≈10 x 300 = 3000*

6 A. *145 x 4 ≈ 150 x 4 = 600 > 450*

7 B. *21 x 19 ≈ 20 x 20 = 400 ≈399*

8 4 and 18. *4 x 18 = 72*

9 18 and 50. *18 x 50 ≈ 20 x 50 = 1000*

10 1340. *124 620 ÷ 930 = 134. So 124620 ÷ 93 is ten times larger.*

11 D. *The cat eats 300 grams in two days .So it eats 900 grams in six days.*

12 96 km/h. *Outward trip is 6 x 80 = 480 km. So the total distance is 2 x 480 = 960 km.*
Total time = 10 hours.
So average = 960 ÷ 10 = 96 km/h.

13 First box has 9 and second box has 7.

14 First box has 0 and second box has 5.

15 B.

16 E. *Smallest possible answer is 100 + 100 = 200 which has 3 digits, and the largest is 999 + 999 = 1998 which has 4 digits.*

17 C. *Smallest possible answer is 10 x 10 = 100 which has 3 digits, and the largest is 99 x 99 which has 4 digits.*

18 A.

19 B. *45 x 105 is a bit more than 45 x 100 = 4500 ≈ 4600.*

20 C.

21 D.

22 C. *80 lots of 40 = 40 lots of 80.*

23 C.

24 B. *145 x 4 = 4 x 145 = 145 + 145 + 145 + 145 < 144 + 146 + 148 + 150.*

25 C. *Any number times zero is zero.*

26 C.

27 12 555.

28 =. *Division by eight is the same as multiplying by an eighth.*

29 B.

30 D. *3 x 98 = 3 x 100 − 3 x 2.*

31 A ≈ 100, B ≈ 450 and C ≈ 700.

32 12356

33 21 356.

34

35 403

36 6092

37 37

38 12. *Each third is 4 apples. There are 3 thirds originally. So 3 x 4 = 12.*

39 D.

40 E.

41 $\frac{4}{9}$

42 D. $\frac{4}{7}$ *is over* $\frac{1}{2}$ *. So* $\frac{4}{7} + \frac{1}{2} > \frac{1}{2} + \frac{1}{2} = 1$

43 C. $\frac{1}{2} = \frac{3}{6}$ *. And multiplying by 1 leaves any number unchanged.*

44 B.

45 G.

46 >. $5 \times 7\frac{1}{2} = 5 \times 7 + 5 \times \frac{1}{2}$
$= 35 + 2\frac{1}{2}$
$> 35 + \frac{1}{2}$

47 About $\frac{1}{3}$.

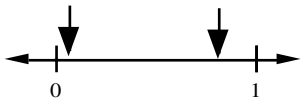
48

49 D.

50 A

51

52



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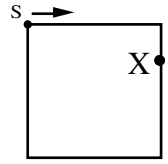


54 C and D true.

55 D.

56 E.

57

58 $\frac{1}{2}$

59 10

60 There are infinitely many answers.
Examples: $\frac{2}{3}$ and $\frac{4}{5}$

61 A.

62 $\frac{9}{12}$

63 D. (Infinite number actually.)
Examples: $\frac{1}{2}$ and $\frac{9}{20}$.

64 $\frac{17}{8}$ or $\frac{18}{8}$ or $\frac{19}{8}$ or $\frac{20}{8}$ or $\frac{21}{8}$ or $\frac{22}{8}$ or $\frac{23}{8}$

65 There are infinitely many answers. In all cases denominator > 10 x numerator.

66 $\frac{4}{5}$

67 There are infinitely many answers. In all cases
Denominator > 2 x numerator. *And*
Denominator < 4 x numerator

68 A. T*en bottles at second store costs 2* x *$4.15 = $8.30 > $7.95*

69 B. *0.98 is just a little less than 1. Multiplying by a number just under 1 reduces the number a little.*

70 C. *Dividing by a number just less than 1 increases the answer a little.*

71 A. *9 hundredths times 87 is a lot less than 87.*

72 C. *87 x 1.076 is a number just over 87.*

73 D. *0.09 is a small number. Dividing by a small number creates much larger numbers.*

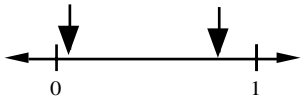
74 C.

75 A.

76 A. *0.5* x *840 = half of 840 = 840 ÷ 2.*

77 A.

78



79 D.

80 Somewhere between 0.4 and 0.5
Example: 0.45

81 About 0.02 up to 0.03
Example: 0.024

82 B.

83 C.

84 About 0.007

85 0.3 then 30.5% then 0.595 then $\frac{3}{5}$ then 61%.

86 467.

87 C.

88 D. There are infinitely many answers.
Example: 1.52345

89 B. *Increase = 10 marks. Fraction increase* $= \frac{10}{40} = 0.25 = 25\%$.

90 $4.05.
90% of $4.50 = 0.90 x *$4.50 = $4.05*

91 A.

92 C.

93 A.