



Multiplying and Dividing Powers of Ten

Name: _____

Solve each problem.

$$5.47 \times 10^4$$

This is the same as saying:

$$5.47 \times (10 \times 10 \times 10 \times 10)$$

And because the base is 10 you can just move the decimal 4 places to the right to solve.

$$5.47 \times 10^4 = 54,700$$

$$\underline{5} \underline{4} \underline{7} \underline{0} \underline{0}.$$

$$2.36 \div 10^2$$

Division is the same way. Only instead of moving the decimal right, you move it left.

You can also multiply a negative exponent, which means the same thing.

$$2.36 \times 10^{-2} = 2.36 \div 10^2$$

$$\underline{.0} \underline{2} \underline{3} \underline{6}$$

1) $8.416 \div 10^3$

2) 45.7×10^2

3) $4.38 \div 10^3$

4) 19.32×10^1

5) $4.7 \div 10^2$

6) 42.88×10^3

7) $7.3 \div 10^3$

8) 4.67×10^1

9) $1.5 \div 10^3$

10) 43.449×10^3

11) $726.191 \div 10^2$

12) 37.7×10^2

13) $6.399 \div 10^3$

14) 146.4×10^1

15) $75.54 \div 10^2$

16) 5.989×10^2

17) $4.621 \div 10^3$

18) 58.858×10^1

19) $5.7 \div 10^4$

20) 74.348×10^1

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____



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Answers

1. **0.008416**

2. **4,570**

3. **0.00438**

4. **193.2**

5. **0.047**

6. **42,880**

7. **0.0073**

8. **46.7**

9. **0.0015**

10. **43,449**

11. **7.26191**

12. **3,770**

13. **0.006399**

14. **1,464**

15. **0.7554**

16. **598.9**

17. **0.004621**

18. **588.58**

19. **0.00057**

20. **743.48**