Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 1 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $76 \times 10^3 =$ **76,000**
2. $39 \times 10^3 =$ **39,000**
3. $94 \times 10^2 =$ **9,400**
4. $98 \times 10^3 =$ **98,000**
5. $97 \times 10^2 =$ **9,700**
6. $45 \times 10^2 =$ **4,500**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $72.6 \times 10 =$ **726**
8. $28.56 \times 1{,}000 =$ **28,560**
9. $99.82 \times 1{,}000 =$ **99,820**
10. $78.15 \times 10^2 =$ **7,815**
11. $25.14 \times 10^1 =$ **251.4**
12. $44.27 \times 10^3 =$ **44,270**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $9{,}742 \div 10^1 =$ **974.2**
14. $93.4 \div 10^1 =$ **9.34**
15. $6{,}813 \div 100 =$ **68.13**
16. $8{,}698 \div 100 =$ **86.98**
17. $36.4 \div 10^1 =$ **3.64**
18. $174 \div 10 =$ **17.4**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 2 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $20 \times 10^1 =$ **200**
2. $41 \times 10^3 =$ **41,000**
3. $29 \times 10^3 =$ **29,000**
4. $13 \times 10^3 =$ **13,000**
5. $16 \times 10^1 =$ **160**
6. $86 \times 10^3 =$ **86,000**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $55.8 \times 10^2 =$ **5,580**
8. $20.9 \times 100 =$ **2,090**
9. $55.19 \times 10^1 =$ **551.9**
10. $43.56 \times 10^3 =$ **43,560**
11. $46.6 \times 1{,}000 =$ **46,600**
12. $45.45 \times 10^1 =$ **454.5**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $81.3 \div 10^2 =$ **0.813**
14. $1{,}849 \div 100 =$ **18.49**
15. $46.3 \div 10^3 =$ **0.0463**
16. $36.4 \div 100 =$ **0.364**
17. $60.1 \div 10 =$ **6.01**
18. $313 \div 10^1 =$ **31.3**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 3 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $11 \times 10^3 =$ **11,000**
2. $70 \times 10^2 =$ **7,000**
3. $37 \times 10^2 =$ **3,700**
4. $39 \times 10^1 =$ **390**
5. $80 \times 10^1 =$ **800**
6. $3 \times 10^1 =$ **30**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $13.65 \times 10 =$ **136.5**
8. $44.3 \times 1{,}000 =$ **44,300**
9. $99.2 \times 10^3 =$ **99,200**
10. $75.6 \times 1{,}000 =$ **75,600**
11. $26.78 \times 10^1 =$ **267.8**
12. $18.73 \times 1{,}000 =$ **18,730**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $38.2 \div 1{,}000 =$ **0.0382**
14. $87.2 \div 100 =$ **0.872**
15. $84.2 \div 10^1 =$ **8.42**
16. $91.7 \div 10^3 =$ **0.0917**
17. $3{,}751 \div 10 =$ **375.1**
18. $9{,}564 \div 1{,}000 =$ **9.564**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 4 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $93 \times 10^1 =$ **930**
2. $79 \times 10^3 =$ **79,000**
3. $8 \times 10^3 =$ **8,000**
4. $40 \times 10^2 =$ **4,000**
5. $92 \times 10^2 =$ **9,200**
6. $13 \times 10^1 =$ **130**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $59.71 \times 10 =$ **597.1**
8. $26.05 \times 1{,}000 =$ **26,050**
9. $17.62 \times 10^3 =$ **17,620**
10. $17.69 \times 10^3 =$ **17,690**
11. $58.9 \times 10^1 =$ **589**
12. $29.7 \times 1{,}000 =$ **29,700**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $9{,}061 \div 10^3 =$ **9.061**
14. $57.9 \div 100 =$ **0.579**
15. $8.1 \div 10^3 =$ **0.0081**
16. $34.1 \div 10^2 =$ **0.341**
17. $4{,}626 \div 10^1 =$ **462.6**
18. $15.9 \div 100 =$ **0.159**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 5 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $17 \times 10^3 =$ **17,000**
2. $52 \times 10^1 =$ **520**
3. $78 \times 10^1 =$ **780**
4. $44 \times 10^2 =$ **4,400**
5. $8 \times 10^1 =$ **80**
6. $81 \times 10^2 =$ **8,100**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $8.9 \times 100 =$ **890**
8. $94.1 \times 10^3 =$ **94,100**
9. $58.46 \times 10^2 =$ **5,846**
10. $16.87 \times 10 =$ **168.7**
11. $94.6 \times 10^2 =$ **9,460**
12. $26.4 \times 100 =$ **2,640**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $2.4 \div 10^3 =$ **0.0024**
14. $803 \div 1{,}000 =$ **0.803**
15. $37.8 \div 10 =$ **3.78**
16. $94.4 \div 10^2 =$ **0.944**
17. $8.2 \div 1{,}000 =$ **0.0082**
18. $977 \div 10^1 =$ **97.7**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 6 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $42 \times 10^1 =$ **420**
2. $65 \times 10^3 =$ **65,000**
3. $77 \times 10^3 =$ **77,000**
4. $71 \times 10^3 =$ **71,000**
5. $25 \times 10^1 =$ **250**
6. $72 \times 10^2 =$ **7,200**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $74.16 \times 1{,}000 =$ **74,160**
8. $29.56 \times 10 =$ **295.6**
9. $58.16 \times 100 =$ **5,816**
10. $81.48 \times 10^2 =$ **8,148**
11. $41.5 \times 1{,}000 =$ **41,500**
12. $96.91 \times 10^3 =$ **96,910**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $7{,}932 \div 10^1 =$ **793.2**
14. $6{,}607 \div 100 =$ **66.07**
15. $9.9 \div 10^3 =$ **0.0099**
16. $2{,}226 \div 10^2 =$ **22.26**
17. $9{,}955 \div 10^1 =$ **995.5**
18. $2{,}205 \div 10^3 =$ **2.205**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 7 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $52 \times 10^3 =$ **52,000**
2. $94 \times 10^3 =$ **94,000**
3. $36 \times 10^2 =$ **3,600**
4. $20 \times 10^2 =$ **2,000**
5. $43 \times 10^1 =$ **430**
6. $14 \times 10^3 =$ **14,000**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $14.31 \times 10^2 =$ **1,431**
8. $94.1 \times 10^2 =$ **9,410**
9. $59.4 \times 10^2 =$ **5,940**
10. $66.5 \times 10^1 =$ **665**
11. $74.92 \times 10 =$ **749.2**
12. $25.2 \times 100 =$ **2,520**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $7{,}203 \div 10^2 =$ **72.03**
14. $47.1 \div 10^1 =$ **4.71**
15. $31.7 \div 10^2 =$ **0.317**
16. $8{,}851 \div 10 =$ **885.1**
17. $3.9 \div 10^3 =$ **0.0039**
18. $9{,}226 \div 10^3 =$ **9.226**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 8 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $47 \times 10^2 =$ **4,700**
2. $15 \times 10^2 =$ **1,500**
3. $47 \times 10^1 =$ **470**
4. $35 \times 10^2 =$ **3,500**
5. $31 \times 10^3 =$ **31,000**
6. $70 \times 10^1 =$ **700**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $51.83 \times 1{,}000 =$ **51,830**
8. $63.3 \times 10^1 =$ **633**
9. $50.5 \times 100 =$ **5,050**
10. $85.54 \times 100 =$ **8,554**
11. $25.7 \times 10^3 =$ **25,700**
12. $71.9 \times 1{,}000 =$ **71,900**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $84.8 \div 10^3 =$ **0.0848**
14. $6{,}112 \div 10^1 =$ **611.2**
15. $80.8 \div 10^3 =$ **0.0808**
16. $49.7 \div 10^2 =$ **0.497**
17. $9{,}721 \div 10^2 =$ **97.21**
18. $75.4 \div 10 =$ **7.54**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 9 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $60 \times 10^3 =$ **60,000**
2. $89 \times 10^1 =$ **890**
3. $93 \times 10^3 =$ **93,000**
4. $83 \times 10^2 =$ **8,300**
5. $90 \times 10^1 =$ **900**
6. $76 \times 10^2 =$ **7,600**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $43.3 \times 1{,}000 =$ **43,300**
8. $82.7 \times 10 =$ **827**
9. $15.9 \times 10^3 =$ **15,900**
10. $80.23 \times 10^3 =$ **80,230**
11. $28.26 \times 10^2 =$ **2,826**
12. $22.83 \times 10^1 =$ **228.3**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $34.9 \div 10^1 =$ **3.49**
14. $4{,}343 \div 100 =$ **43.43**
15. $27.6 \div 100 =$ **0.276**
16. $86.7 \div 10^2 =$ **0.867**
17. $13.1 \div 100 =$ **0.131**
18. $8{,}241 \div 1{,}000 =$ **8.241**

Multiplying and Dividing by Powers of 10 - ANSWER KEY

Grade 5 | Multiplying and dividing by powers of 10, including exponents | Version 10 of 10

Powers of 10: $10^1 = 10$, $10^2 = 100$, $10^3 = 1{,}000$. Multiplying by 10 moves each digit one place to the left; dividing by 10 moves each digit one place to the right.

Part A: Multiply by a power of 10. The exponent tells how many zeros to write.

1. $89 \times 10^3 =$ **89,000**
2. $60 \times 10^2 =$ **6,000**
3. $7 \times 10^3 =$ **7,000**
4. $81 \times 10^1 =$ **810**
5. $14 \times 10^2 =$ **1,400**
6. $58 \times 10^3 =$ **58,000**

Part B: Multiply. Move the decimal point one place to the right for each power of 10.

7. $13.53 \times 10^1 =$ **135.3**
8. $61.03 \times 10^3 =$ **61,030**
9. $82.9 \times 10^3 =$ **82,900**
10. $64.64 \times 1{,}000 =$ **64,640**
11. $97.39 \times 10^3 =$ **97,390**
12. $44.5 \times 1{,}000 =$ **44,500**

Part C: Divide. Move the decimal point one place to the left for each power of 10.

13. $28.8 \div 1{,}000 =$ **0.0288**
14. $4{,}597 \div 10 =$ **459.7**
15. $7{,}413 \div 100 =$ **74.13**
16. $40.7 \div 10^3 =$ **0.0407**
17. $7{,}694 \div 10^2 =$ **76.94**
18. $20.5 \div 10^3 =$ **0.0205**