

TARGET To multiply and divide decimals by 10, 100 and 1000.

- Multiplying – digits move left
- Dividing – digits move right
- ×/÷ by 10 – digits move 1 place
- ×/÷ by 100 – digits move 2 places
- ×/÷ by 1000 – digits move 3 places

Examples

$$1.327 \times 10 = 13.27$$

$$1.327 \times 100 = 132.7$$

$$1.327 \times 1000 = 1327$$

$$5038 \div 10 = 503.8$$

$$5038 \div 100 = 50.38$$

$$5038 \div 1000 = 5.038$$

A

Multiply by 10.

- | | |
|--------|---------|
| 1 0.3 | 7 2.07 |
| 2 1.8 | 8 1.35 |
| 3 0.64 | 9 6.9 |
| 4 3.17 | 10 0.81 |
| 5 0.02 | 11 5.44 |
| 6 0.59 | 12 0.06 |

Divide by 10.

- | | |
|--------|--------|
| 13 5 | 19 39 |
| 14 1.2 | 20 0.1 |
| 15 28 | 21 6 |
| 16 0.7 | 22 2.5 |
| 17 15 | 23 74 |
| 18 4.3 | 24 0.8 |

Copy and complete.

- 25 × 10 = 0.8
- 26 × 10 = 75
- 27 × 10 = 2.3
- 28 × 10 = 10.6
- 29 ÷ 10 = 4.7
- 30 ÷ 10 = 0.22
- 31 ÷ 10 = 0.9
- 32 ÷ 10 = 3.05

B

Multiply by:

- | | |
|---------|----------|
| 100 | 1000 |
| 1 3.15 | 7 0.3 |
| 2 0.6 | 8 0.065 |
| 3 1.024 | 9 0.01 |
| 4 0.09 | 10 2.5 |
| 5 5.8 | 11 0.002 |
| 6 0.107 | 12 4.28 |

Divide by:

- | | |
|---------|-----------|
| 100 | 1000 |
| 13 45 | 19 290 |
| 14 1.2 | 20 54 |
| 15 370 | 21 6100 |
| 16 9 | 22 327 |
| 17 0.6 | 23 18 700 |
| 18 1485 | 24 3 |

Copy and complete.

- 25 × 10 = 0.06
- 26 ÷ 100 = 0.9
- 27 × 100 = 45
- 28 ÷ 1000 = 0.247
- 29 $0.02 \times \square = 20$
- 30 $83 \div \square = 8.3$
- 31 $0.05 \times \square = 5$
- 32 $400 \div \square = 0.4$

C

Copy and complete.

- 1 × 10 = 0.8
- 2 ÷ 100 = 0.4
- 3 × 1000 = 163
- 4 ÷ 10 = 0.207
- 5 × 100 = 0.9
- 6 ÷ 1000 = 0.055
- 7 $0.18 \times \square = 18$
- 8 $0.07 \div \square = 0.007$
- 9 $0.06 \times \square = 60$
- 10 $1.2 \div \square = 0.012$
- 11 $0.3 \times \square = 3$
- 12 $290 \div \square = 0.29$

Work out and write each answer as a decimal.

- 13 one half of a tenth
- 14 one tenth of a tenth
- 15 one half of a hundredth
- What number is:
- 16 10 times larger than three quarters of 2
- 17 100 times larger than a half of a quarter
- 18 1000 times larger than a twentieth?