

Place value — 3-digit numbers

Name: _____

Date: _____



Write what the underlined digit is worth.

1 994 → 900

2 805 → _____

3 107 → _____

4 502 → _____

5 598 → _____

6 504 → _____

7 226 → _____

8 557 → _____

9 407 → _____

10 394 → _____

11 447 → _____

12 909 → _____



Place value — 3-digit numbers

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Write each number in expanded form.

1 $952 = \underline{900 + 50 + 2}$

2 $708 = \underline{\hspace{2cm}}$

3 $809 = \underline{\hspace{2cm}}$

4 $177 = \underline{\hspace{2cm}}$

5 $123 = \underline{\hspace{2cm}}$

6 $300 = \underline{\hspace{2cm}}$

7 $109 = \underline{\hspace{2cm}}$

8 $703 = \underline{\hspace{2cm}}$

9 $258 = \underline{\hspace{2cm}}$

10 $584 = \underline{\hspace{2cm}}$

11 $461 = \underline{\hspace{2cm}}$

12 $901 = \underline{\hspace{2cm}}$



Rounding — To the nearest 10

Name: _____

Date: _____



Round each number to the nearest 10.

1 $242 \approx \underline{240}$

2 $765 \approx \underline{\hspace{2cm}}$

3 $542 \approx \underline{\hspace{2cm}}$

4 $343 \approx \underline{\hspace{2cm}}$

5 $895 \approx \underline{\hspace{2cm}}$

6 $445 \approx \underline{\hspace{2cm}}$

7 $197 \approx \underline{\hspace{2cm}}$

8 $504 \approx \underline{\hspace{2cm}}$

9 $171 \approx \underline{\hspace{2cm}}$

10 $903 \approx \underline{\hspace{2cm}}$

11 $286 \approx \underline{\hspace{2cm}}$

12 $583 \approx \underline{\hspace{2cm}}$



Estimating — To the nearest ten

Name: _____

Date: _____



Round each number to the nearest ten, then add.

1 $154 + 653 \approx \underline{800}$

2 $154 + 829 \approx \underline{\hspace{2cm}}$

3 $133 + 202 \approx \underline{\hspace{2cm}}$

4 $105 + 279 \approx \underline{\hspace{2cm}}$

5 $126 + 686 \approx \underline{\hspace{2cm}}$

6 $126 + 246 \approx \underline{\hspace{2cm}}$

7 $147 + 323 \approx \underline{\hspace{2cm}}$

8 $112 + 389 \approx \underline{\hspace{2cm}}$

9 $119 + 499 \approx \underline{\hspace{2cm}}$

10 $161 + 103 \approx \underline{\hspace{2cm}}$

11 $112 + 851 \approx \underline{\hspace{2cm}}$

12 $147 + 961 \approx \underline{\hspace{2cm}}$



Estimating — To the nearest ten

Name: _____

Date: _____



Round each number to the nearest ten, then multiply.

1 $26 \times 32 \approx \underline{900}$

2 $44 \times 11 \approx \underline{\hspace{2cm}}$

3 $23 \times 74 \approx \underline{\hspace{2cm}}$

4 $86 \times 95 \approx \underline{\hspace{2cm}}$

5 $74 \times 18 \approx \underline{\hspace{2cm}}$

6 $86 \times 25 \approx \underline{\hspace{2cm}}$

7 $86 \times 18 \approx \underline{\hspace{2cm}}$

8 $53 \times 11 \approx \underline{\hspace{2cm}}$

9 $47 \times 18 \approx \underline{\hspace{2cm}}$

10 $65 \times 11 \approx \underline{\hspace{2cm}}$

11 $53 \times 81 \approx \underline{\hspace{2cm}}$

12 $86 \times 74 \approx \underline{\hspace{2cm}}$



Power Pack · Place value, rounding and estimating

— Answer key



Value of a digit

- | | | | |
|------------------|------------------|------------------|-------------------|
| 1. 994 (9) → 900 | 2. 805 (8) → 800 | 3. 107 (1) → 100 | 4. 502 (2) → 2 |
| 5. 598 (5) → 500 | 6. 504 (4) → 4 | 7. 226 (6) → 6 | 8. 557 (7) → 7 |
| 9. 407 (7) → 7 | 10. 394 (9) → 90 | 11. 447 (4) → 40 | 12. 909 (9) → 900 |

Expanded form

- | | | | |
|-----------------------|------------------------|------------------------|-----------------------|
| 1. 952 = 900 + 50 + 2 | 2. 708 = 700 + 8 | 3. 809 = 800 + 9 | 4. 177 = 100 + 70 + 7 |
| 5. 123 = 100 + 20 + 3 | 6. 300 = 300 | 7. 109 = 100 + 9 | 8. 703 = 700 + 3 |
| 9. 258 = 200 + 50 + 8 | 10. 584 = 500 + 80 + 4 | 11. 461 = 400 + 60 + 1 | 12. 901 = 900 + 1 |

Rounding

- | | | | |
|--------------|---------------|---------------|---------------|
| 1. 242 ≈ 240 | 2. 765 ≈ 770 | 3. 542 ≈ 540 | 4. 343 ≈ 340 |
| 5. 895 ≈ 900 | 6. 445 ≈ 450 | 7. 197 ≈ 200 | 8. 504 ≈ 500 |
| 9. 171 ≈ 170 | 10. 903 ≈ 900 | 11. 286 ≈ 290 | 12. 583 ≈ 580 |

Estimating sums

- | | | | |
|--------------------------------|---------------------------------|---------------------------------|----------------------------------|
| 1. 154 + 653 ≈ 150 + 650 = 800 | 2. 154 + 829 ≈ 150 + 830 = 980 | 3. 133 + 202 ≈ 130 + 200 = 330 | 4. 105 + 279 ≈ 110 + 280 = 390 |
| 5. 126 + 686 ≈ 130 + 690 = 820 | 6. 126 + 246 ≈ 130 + 250 = 380 | 7. 147 + 323 ≈ 150 + 320 = 470 | 8. 112 + 389 ≈ 110 + 390 = 500 |
| 9. 119 + 499 ≈ 120 + 500 = 620 | 10. 161 + 103 ≈ 160 + 100 = 260 | 11. 112 + 851 ≈ 110 + 850 = 960 | 12. 147 + 961 ≈ 150 + 960 = 1110 |

Estimating products

- | | | | |
|-----------------------------|-----------------------------|------------------------------|------------------------------|
| 1. 26 × 32 ≈ 30 × 30 = 900 | 2. 44 × 11 ≈ 40 × 10 = 400 | 3. 23 × 74 ≈ 20 × 70 = 1400 | 4. 86 × 95 ≈ 90 × 100 = 9000 |
| 5. 74 × 18 ≈ 70 × 20 = 1400 | 6. 86 × 25 ≈ 90 × 30 = 2700 | 7. 86 × 18 ≈ 90 × 20 = 1800 | 8. 53 × 11 ≈ 50 × 10 = 500 |
| 9. 47 × 18 ≈ 50 × 20 = 1000 | 10. 65 × 11 ≈ 70 × 10 = 700 | 11. 53 × 81 ≈ 50 × 80 = 4000 | 12. 86 × 74 ≈ 90 × 70 = 6300 |