

11. SQUARING AND SQUARE ROOTS

Practice 1 slide 2 Square these numbers:

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|-------|-------|-------|-------|
| 1) 21 | 2) 32 | 3) 53 | 4) 44 |
| 5) 17 | 6) 71 | 7) 33 | 8) 66 |

Practice 2 slide 3 Square these numbers mentally:

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|-------|-------|-------|
| 1) 51 | 2) 16 | 3) 23 |
| 4) 18 | 5) 26 | 6) 74 |

Practice 3 slide 4 Square these:

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|-------------|--------------|
| 1) $5x + 2$ | 2) $x + 7$ |
| 3) $3x + 1$ | 4) $2x + 4y$ |

Practice 5 slide 5 Square these:

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|--------|-------|--------------------|--------|
| 1) 65 | 2) 85 | 3) $9\frac{1}{2}$ | 4) 105 |
| 5) 305 | 6) 15 | 7) $15\frac{1}{2}$ | 8) 295 |

Practice 6 slide 6 Find an approximate square root:

- | | | |
|---------|---------|---------|
| 1) 3844 | 2) 3025 | 3) 6889 |
| 4) 5776 | 5) 529 | |

Practice 7 slide 7 Find the square root:

1) 3844

2) 3025

3) 6889

4) 529

5) 5776

Practice 8 slide 8 Find the square root:

1) 3721

2) 3364

3) 5929

4) 1024

5) 2116

Practice 9 slide 9 Which are correct (use digit sums)?

1) $49^2 = 2401$

2) $84^2 = 7056$

3) $73^2 = 5229$

4) $34^2 = 1146$

Practice 10 slide 11 Find the Duplex:

1) 5

2) 16

3) 27

4) 128

5) 209

6) 718

7) 4211

8) 3016

9) 2222

10) 23104

Practice 11 slide 12 Square these numbers:

1) 53

2) 18

3) 44

4) 72

Practice 12 slide 13 Square these numbers:

1) 413

2) 145

3) 404

4) 753

Practice 13 slide 14 Square these numbers:

- 1) 5213 2) 2435 3) 4706 4) 2083

Practice 14 slide 16 Square these:

- 1) $5x + 4$ 2) $x^2 + 5x + 2$ 3) $x + 4y + 1$

Practice 15 slide 17 Find an approximate square root:

- 1) 5050 2) 555 3) 70
4) 7000 5) 2345 6) 23456

Practice 16 slide 18 Find the first two figures of the square root:

- 1) 5050 2) 555 3) 17161
4) 7000 5) 2121 6) 60

Practice 17 slide 19 Find the square root (first four figures):

- 1) 27.2 2) 11.23 3) 212798 4) 4140

Practice 18 slide 20 Find the square root (first four figures):

- 1) 27 2) 1930 3) 575 4) 3883

**ANSWERS
LESSON 11**

Pr 1

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|--------|---------|---------|---------|
| 1) 441 | 2) 1024 | 3) 2809 | 4) 1936 |
| 5) 289 | 6) 5041 | 7) 1089 | 8) 4356 |

Pr 2

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|---------|--------|--------|--------|--------|---------|
| 1) 2601 | 2) 256 | 3) 529 | 4) 324 | 5) 676 | 6) 5476 |
|---------|--------|--------|--------|--------|---------|

Pr 3

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|----------------------|-------------------------|
| 1) $25x^2 + 20x + 4$ | 2) $x^2 + 14x + 49$ |
| 3) $9x^2 + 6x + 1$ | 4) $4x^2 + 16xy + 4y^2$ |

Pr 5

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|----------|---------|---------------------|----------|
| 1) 4225 | 2) 7225 | 3) $90\frac{1}{4}$ | 4) 11025 |
| 5) 93025 | 6) 225 | 7) $240\frac{1}{4}$ | 8) 87025 |

Pr 6

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|-------|-------|-------|-------|-------|
| 1) 62 | 2) 55 | 3) 83 | 4) 76 | 5) 23 |
|-------|-------|-------|-------|-------|

Pr 7

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|-------|-------|-------|-------|-------|
| 1) 62 | 2) 55 | 3) 83 | 4) 23 | 5) 76 |
|-------|-------|-------|-------|-------|

Pr 8

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|-------|-------|-------|-------|-------|
| 1) 61 | 2) 58 | 3) 77 | 4) 32 | 5) 46 |
|-------|-------|-------|-------|-------|

Pr 9

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|------------|------------|----------|----------|
| 1) correct | 2) correct | 3) wrong | 4) wrong |
|------------|------------|----------|----------|

Pr 10

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|--------|-------|-------|-------|--------|
| 1) 25 | 2) 12 | 3) 28 | 4) 20 | 5) 36 |
| 6) 113 | 7) 12 | 8) 36 | 9) 16 | 10) 17 |

Pr 11

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|---------|--------|---------|---------|
| 1) 2809 | 2) 324 | 3) 1936 | 4) 5184 |
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Pr 12

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|-----------|----------|-----------|-----------|
| 1) 170569 | 2) 21025 | 3) 163216 | 4) 567009 |
|-----------|----------|-----------|-----------|

Pr 13

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|-------------|------------|-------------|------------|
| 1) 27175369 | 2) 5929225 | 3) 22146436 | 4) 4338889 |
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Pr 14

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|--------------------------------------|------------------------------------|
| 1) $25x^2 + 40x + 16$ | 2) $x^4 + 10x^3 + 29x^2 + 20x + 4$ |
| 3) $x^2 + 8xy + 16y^2 + 2x + 8y + 1$ | |

Pr 15

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|-------|-------|------|-------|-------|--------|
| 1) 7- | 2) 2- | 3) 8 | 4) 8- | 5) 4- | 6) 1-- |
|-------|-------|------|-------|-------|--------|

Pr 16

1) 71 2) 23 3) 13- 4) 83 5) 46 6) 7.7

Pr 17

1) 5.215 2) 3.351 3) 461.3 4) 64.34

Pr 18

1) 5.196 2) 43.93 3) 23.98 4) 62.31