9. VERTICALLY AND CROSSWISE

Practice 1 slide 2

1)
```
2   1
3   1 ×
___
```

2)
```
2   2
1   3 ×
___
```

3)
```
3   2
2   1 ×
___
```

Practice 2 slide 2

1)
```
2   4
3   1 ×
___
```

2)
```
4   3
2   3 ×
___
```

3)
```
5   4
2   3 ×
___
```

4)
```
2   8
4   3 ×
___
```

5)
```
6   7
7   3 ×
___
```

6)
```
1   9
2   7 ×
___
```

Practice 3 slide 3

1)
```
3   4
3   7 ×
___
```

2)
```
5   3
4   2 ×
___
```

3)
```
6   4
3   4 ×
___
```

4)
```
3   5
4   7 ×
___
```

5)
```
8   6
4   2 ×
___
```

6)
```
9   1
9   2 ×
___
```

Practice 4 slide 6 Divide:

1)
```
    2 1 ×
___
4 6 2
```

2)
```
    4 1 ×
___
1 7 2 2
```

3)
```
    3 3 ×
___
1 1 8 8
```

4)
```
    7 4 ×
___
5 3 2 8
```

5)
```
    8 2 ×
___
2 2 9 6
```

6)
```
    5 6 ×
___
2 9 7 0
```

Practice 5 slide 8 Multiply:

1)
$$5x + 1$$
$$3x + 4 \times$$
_____

2)
$$x + 7$$
$$x + 6 \times$$
_____

3)
$$6x - 5$$
$$3x + 4 \times$$
_____

4)
$$4x - 3$$
$$2x - 7 \times$$
_____

Practice 6 slide 9 Divide:

1)
$$5x + 6 \times$$
$$10x2 + 17x + 6$$

2)
$$3x + 2 \times$$
$$21x^2 + 38x + 16$$

3)
$$x + 7 \times$$
$$6x2 + 44x + 14$$

4)
$$3x + 4 \times$$
$$6x2 + 17x + 17$$

Practice 7 slides 10, 11 Find the area of these rectangles:

1) 2 ft 3 in by 2 ft 5 in

2) 4 ft 3 in by 5 ft 6 in

Practice 8 slide 12 Add/subtract:

1) $\dfrac{3}{4} + \dfrac{1}{9} =$

2) $\dfrac{1}{2} + \dfrac{2}{5} =$

3) $\dfrac{3}{5} - \dfrac{1}{4} =$

4) $\dfrac{4}{7} - \dfrac{2}{11} =$

5) $\dfrac{1}{2} - \dfrac{1}{3} =$

6) $\dfrac{3}{4} + \dfrac{5}{6} =$

Practice 9 slide 13 Add/subtract:

1) $\frac{3}{8} + 1\frac{6}{} =$

2) $\frac{5}{12} + \frac{5}{8} =$

3) $\frac{7}{10} + \frac{4}{15} =$

4) $\frac{13}{1\frac{1}{4}} - \frac{5}{6} =$

Practice 10 slide 14 Add/subtract:

1) $\frac{2}{5} + \frac{1}{4} + \frac{1}{7} =$

2) $\frac{1}{5} - \frac{2}{3} + \frac{1}{2} =$

Practice 11 slide 15 Which is greater/greatest?

1) $\frac{5}{6}$ or $\frac{4}{5}$

2) $\frac{2}{9}$ or $\frac{4}{17}$

3) $\frac{4}{5}, \frac{7}{8}, \frac{6}{7}$

Practice 12 slide 17 Multiply using vertical/crosswise/crosswise:

1) 113 x 23

2) 123 x 201

3) 224 x 32

Practice 13 slide 18 Multiply 2 figures at a time:

1) 112 x 207

2) 1113 x 302

3) 1201 x 2012

Practice 14 slide 19 Multiply using bar numbers:

1) 29 x 34

2) 49 x 58

3) 28 x 42

Practice 15 slide 20 Multiply (moving multiplier):

1) 2 3 2
   3 1 x

2) 4 1 3
   2 3 x

3) 5 2 4
   4 2 x

Practice 16 slide 21 Multiply (moving multiplier):

1) 2 3 1 2
    3 1 x

2) 1 3 5 2
    2 3 x

3) 4 0 3 5
    4 2 x

Practice 17 slide 22 Multiply by Vertically and Crosswise:

1) 3 2 1
  3 2 1 x

2) 5 1 2
  2 3 2 x

3) 1 6 2
  4 3 2 x

4) 3 2 1 4
  3 2 1 5 x

5) 1 3 1 2
  3 2 3 2 x

6) 4 3 4 3
  3 5 3 4 x

ANSWERS
LESSON 9

Pr 1
1) 651   2) 286   3) 672

Pr 2
1) 744   2) 989   3) 1242   4) 1204   5) 4891   6) 513

Pr 3
1) 1258   2) 2226   3) 2176   4) 1645   5) 3612   6) 8372

Pr 4
1) 22   2) 42   3) 36   4) 72   5) 28   6) 53 rem 2

Pr 5
1) $15x^2 + 23x + 4$ 2) $x^2 + 13x + 42$
3) $18x^2 + 9x - 20$ 4) $8x^2 - 34x + 21$

Pr 6
1) $2x + 1$ 2) $7x + 8$ 3) $6x + 2$ 4) $2x + 3$ rem 5

Pr 7
1) 5 sq ft 63 sq in   2) 23 sq ft 54 sq in

Pr 8
1) 31/36   2) 9/10   3) 7/20   4) 30/77   5) 1/6   6) 19/12

Pr 9
1) 13/24   2) 25/24   3) 29/30   4) 2/21

Pr 10
1) 111/140   2) 1/30

Pr 11
1) 5/6   2) 4/17   3) 7/8

Pr 12
1) 2599   2) 24723   3) 7168

Pr 13
1) 23184   2) 336126   3) 2416412

Pr 14
1) 986   2) 2842   3) 1176

Pr 15
1) 7192   2) 9499   3) 22008

Pr 16
1) 71672   2) 31096   3) 169470

Pr 17
1) 103041   2) 118784   3) 69984
4) 10333010   5) 4240384   6) 15348162