

## Math Study Guide – Pretest

\* means multiply

1.  $371 + 614 =$ 
  - a. 886
  - b. 986
  - c. 985**
  - d. 885
2.  $4257 + 9368 =$ 
  - a. 13,615
  - b. 13,625**
  - c. 12,615
  - d. 12,625
3.  $12,817 + 6,955 =$ 
  - a. 18,772
  - b. 18,762
  - c. 19,762
  - d. 19,772**
4.  $7,538 - 2,417 =$ 
  - a. 4,021
  - b. 5,021
  - c. 4,121
  - d. 5,121**
5.  $735 - 587 =$ 
  - a. 158
  - b. 148**
  - c. 248
  - d. 258
6.  $8,015 - 2,707 =$ 
  - a. 5,308**
  - b. 5,318
  - c. 6,308
  - d. 6,318
7.  $523 * 63 =$ 
  - a. 31,949
  - b. 32,949**
  - c. 32,849
  - d. 31,849
8.  $623 * 7 =$ 
  - a. 4,241
  - b. 4,341
  - c. 4,361**
  - d. 4,261
9.  $703 * 26 =$ 
  - a. 17,268
  - b. 17,278
  - c. 18,278**
  - d. 18,268
10.  $\frac{936}{6} =$ 
  - a. 156**
  - b. 156 r3
  - c. 153
  - d. 153 r3
11.  $\frac{507}{7} =$ 
  - a. 71 r5
  - b. 68 r5
  - c. 72
  - d. 72 r3**
12.  $\frac{14,448}{56} =$ 
  - a. 367
  - b. 267
  - c. 358
  - d. 258**
13. Express  $68/1000$  as a decimal
  - a. 6.8
  - b. 0.068**
  - c. 0.68
  - d. 0.0068
14.  $.23 + 1.5 + .002 =$ 
  - a. 1.75
  - b. 1.732**
  - c. 1.352
  - d. 1.372

15.  $.17 * .23 =$   
 a. **.0391**  
 b. .391  
 c. 391  
 d. 3.91
16.  $\frac{.7}{.04}$  is equal to  
 a. .0175  
 b. .175  
 c. 1.75  
 d. **17.5**
17. Express the hundredths place in .8951  
 a. 8  
 b. **9**  
 c. 5  
 d. 1
18.  $0.72 - 0.57 =$   
 a. 2.5  
 b. .25  
 c. **.15**  
 d. 1.5
19. Round off 3.345 to the nearest tenth  
 a. 3.35  
 b. **3.3**  
 c. 3.34  
 d. 3.4
20. Which is the equivalent decimal number for three hundred and ten thousandths?  
 a. 0.031  
 b. **0.310**  
 c. 3.1  
 d. 0.0031
21.  $1\frac{1}{3} + 2 + \frac{3}{4} =$   
 a.  **$4\frac{1}{12}$**   
 b.  $5\frac{1}{12}$   
 c.  $4\frac{2}{3}$   
 d.  $4\frac{1}{6}$
22.  $2\frac{1}{6} - 1\frac{1}{8} =$   
 a.  **$1\frac{1}{24}$**   
 b.  $1\frac{1}{12}$   
 c.  $\frac{7}{8}$   
 d.  $\frac{1}{3}$
23.  $2\frac{1}{2} * 3\frac{1}{3} * 1\frac{1}{5} =$   
 a.  $6\frac{1}{6}$   
 b.  $6\frac{1}{30}$   
 c.  $6\frac{1}{5}$   
 d. **10**
24.  $\frac{1}{4} / \frac{2}{3} =$   
 a.  $\frac{1}{6}$   
 b.  **$\frac{3}{8}$**   
 c.  $\frac{1}{3}$   
 d.  $1\frac{1}{8}$

25. Which of the following is correct?
- $\frac{1}{3} = \frac{2}{5}$
  - $\frac{1}{4} = \frac{9}{12}$
  - $\frac{2}{3} = \frac{8}{12}$
  - $\frac{3}{5} = \frac{15}{40}$
26. Solve for N in the following:
- $$\frac{N}{3} = \frac{6}{9}$$
- N = 1
  - N = 3
  - N = 2**
  - N = 4
27. Reduce  $\frac{13}{78}$  to lowest terms.
- $\frac{2}{7}$
  - $\frac{1}{6}$**
  - $\frac{8}{5}$
  - $\frac{1}{4}$
28. Express  $\frac{27}{7}$  as a mixed fraction
- $3\frac{5}{7}$
  - $3\frac{6}{7}$**
  - $4\frac{1}{7}$
  - 4
29. Express two hundredths as a percentage
- 20%
  - .2%
  - .02%
  - 2%**
30. 60% of 180 =
- 150
  - 388
  - 108**
  - 120
31. 7 is what percent of 28?
- 20%
  - 25%**
  - 75%
  - 40%
32. 9 is what percent of 27?
- 25%
  - 40%
  - 33%**
  - 20%
33. Two tenths of fifty equals;
- 10**
  - 100
  - 20
  - 25
34. .3% of 60 =
- 20
  - 1.8
  - 18
  - .18**
35. The ratio of 2 to 5 = (?)%
- 10
  - 40**
  - 4
  - .1

36.  $3/16 = (?)\% * \frac{3}{4}$   
a. 20  
**b. 25**  
c. 15  
d. 10
37. Express  $3/8$  as a decimal.  
a. 0.24  
b. 0.025  
**c. 0.375**  
d. 0.32
38. Express 0.18 as a percentage.  
**a. 18%**  
b. 1.8%  
c. 0.18%  
d. .0018%
39. Express  $25/5$  as a percentage.  
**a. 500%**  
b. 50%  
c. 5%  
d. .05%
40. Express  $4/5$  as a percentage.  
a. 2%  
b. .08%  
**c. 80%**  
d. 8%
41.  $5.5/20\% = ?$   
a. 1.1  
b. 2.75  
**c. 27.5**  
d. .11
42. Express 0.012 as a percentage.  
a. 0.12%  
b. 12%  
**c. 1.2%**  
d. 120%

43. Express the ratio of 12:30 as a percentage.  
 a. 2.5%  
 b. 250%  
 c. .25%  
**d. 40%**
44. Express  $12/36$  as a percentage.  
**a. 33.3%**  
 b. .333%  
 c. 3%  
 d. .3%
45. Express 37.5% as a common fraction.  
 a.  $4/9$   
 b.  $5/18$   
 c.  $3/11$   
**d.  $3/8$**
46. Express 420% as a decimal  
 a. .042  
 b. 42  
 c. .420  
**d. 4.2**
47. Solve for x: 50 is 20% of x  
 a.  $X = 200$   
 b.  $X = 150$   
**c.  $X = 250$**   
 d.  $X = 300$
48.  $7\frac{2}{5}\%$  of x is equal to 74. Solve for x.  
 a.  $x = 50$   
**b.  $x = 1000$**   
 c.  $x = 100$   
 d.  $x = 500$
49. Express 25% as a reduced common fraction.  
 a.  $25/100$   
 b.  $4/16$   
**c.  $\frac{1}{4}$**   
 d.  $10/40$
50. Express 30% as a decimal.  
 a. 3000  
 b. .003  
 c. 3.0  
**d. 0.3**
51. 4 is 25% of x. Solve for x.  
**a.  $x = 16$**   
 b.  $x = 24$   
 c.  $x = 12$   
 d.  $x = 36$
52. 48% of x = 60. Solve for x.  
 a. 175  
 b. 230  
**c. 125**  
 d. 120
53.  $6a + 3a - 4a =$   
 a.  $13a$   
 b.  $-5a$   
**c.  $5a$**   
 d.  $9a$
54.  $(x^2 + 3x) - (x^2 + 2x + 3) =$   
**a.  $x - 3$**   
 b.  $2x^2 + 5x + 3$   
 c.  $5x + 3$   
 d.  $x + 3$
55.  $2y + 5 = 27$ . Solve for y.  
 a.  $y = 12$   
**b.  $y = 11$**   
 c.  $y = 16$   
 d.  $y = 8$
56.  $2(x+1) = 3x - 1$   
 a.  $5x = 3$   
 b.  $x = 8$   
 c.  $x = 2$   
**d.  $x = 3$**

57.  $6bx^2 - 3bx^2 =$   
a.  **$3bx^2$**   
b.  $-3bx^2$   
c.  $9bx^2$   
d.  $-9bx^2$
58.  $6(t + 3) + 8 - 5(t+2) =$   
a.  $2t + 36$   
b.  **$t + 16$**   
c.  $t + 36$   
d.  $t + 13$
59.  $3x - 4 = 8$  Solve for x  
a.  $x = 2$   
b.  $x = 3$   
c.  **$x = 4$**   
d.  $x = 5$
60.  $5m + 8 = 3(m + 4)$  Solve for m.  
a.  $m = -2$   
b.  $m = 4$   
c.  $m = 3$   
d.  **$m = 2$**