## Algebra 1

Name

## Assignment

Date $\qquad$ Period $\qquad$

## Solve each problem.

1) 86 is what percent of 35 ?
2) 93 is what percent of 158 ?
3) 99 is $98 \%$ of what?
4) What is $112 \%$ of 9 ?
5) $40 \%$ of what is 17.3 ?
6) $77 \%$ of 25 is what?
7) 115 is $84 \%$ of what?
8) What percent of 151 is 122 ?
9) What is $95 \%$ of 147 ?
10) 11 is $42 \%$ of what?
11) What is $48 \%$ of 92 ?
12) $97 \%$ of what is 120 ?
13) $5 \%$ of what is 158 ?
14) $5 \%$ of 95 is what?
15) 144 is $400 \%$ of what?
16) What percent of 147 is 141 ?
17) $4 \%$ of 61 is what?
18) $13 \%$ of what is 157 ?
19) What percent of 112 is 66.8 ?
20) $380 \%$ of 17.6 is what?
21) What percent of 130 is 94 ?
22) 74 is $92 \%$ of what?
23) What percent of 54 is 120 ?
24) What percent of 16 is 119 ?
25) $37 \%$ of what is 63 ?
26) What is $36 \%$ of 40 ?
27) What percent of 122 is 131 ?
28) $49 \%$ of what is 91 ?
29) 123 is what percent of 111 ?
30) $2 \%$ of 77 is what?
31) $4 \%$ of what is 54.4 ?
32) What percent of 147 is 57 ?
33) 33 is $4 \%$ of what?
34) $76 \%$ of what is $141.8 ?$
35) 52 is what percent of 54 ?
36) $77 \%$ of what is 108 ?
37) $51 \%$ of what is 156.6 ?
38) $67 \%$ of what is 117 ?
39) $9 \%$ of what is 151 ?
40) $2 \%$ of what is $7 ?$
41) What percent of 122 is 94 ?
42) $58 \%$ of what is 86.3 ?
43) What percent of 106 is 47 ?
44) $69 \%$ of what is 16 ?
45) What percent of 72.8 is 15 ?
46) $12 \%$ of 103 is what?
47) $4 \%$ of 134 is what?
48) What is $20 \%$ of 19.3 ?
49) 36 is $5 \%$ of what?
50) What percent of 106 is 50 ?
51) $55 \%$ of what is 131 ?
52) What is $38 \%$ of 80 ?
53) $74 \%$ of what is 29.8 ?
54) 141 is $19 \%$ of what?
55) What percent of 84.5 is 74 ?
56) 100 is what percent of 103.7 ?
57) 135 is what percent of 87 ?
58) What percent of 102.4 is 5 ?
59) 69 is $40 \%$ of what?
60) $14 \%$ of what is 46 ?
61) What percent of 105 is 93 ?
62) $17 \%$ of 115 is what?
63) $130 \%$ of 85 is what?
64) $76 \%$ of 33.2 is what?
65) 30 is $42 \%$ of what?

Find each percent change. State if it is an increase or a decrease.
81) From 21 to 66
83) From 38 to 17
85) From 93 to 82
87) From 35 to 48
89) From 87 to 31
91) From 55 to 41
93) From 22 to 26
95) From 93 to 33
97) From 69 to 9
99) From 97 to 49
101) From 87 to 34
103) From 68 to 94
105) From 48 to 45
107) From 40 to 95.2
109) From 68 to 37
82) From 74 to 21
84) From 79 to 100
86) From 82 to 14
88) From 66.4 to 36
90) From 82 to 18
92) From 78 to 63
94) From 87 to 77
96) From 12.9 to 28
98) From 10 to 3
100) From 59 to 53
102) From 91 to 67
104) From 24.6 to 30
106) From 62 to 49
108) From 19 to 22
110) From 50 to 87
111) From 79 to 39
113) From 38 to 42
115) From 92.3 to 62
117) From 86 to 24
119) From 25 to 29
121) From 56 to 53
123) From 81 to 73
125) From 56 to 96
127) From 23 to 100
129) From 47 to 15
131) From 73 to 7
133) From 37 to 54
135) From 77 to 41
137) From 25 to 33
139) From 58 to 86
112) From 52 to 29.8
114) From 38 to 71.3
116) From 24 to 12
118) From 95 to 10
120) From 49 to 63
122) From 55 to 53
124) From 51 to 37
126) From 89 to 98
128) From 23 to 19
130) From 87 to 5
132) From 45 to 9
134) From 54 to 85
136) From 52 to 50
138) From 59 to 49
140) From 89 to 75

## Assignment

Date $\qquad$ Period $\qquad$

## Solve each problem.

1) 86 is what percent of 35 ?
245.7\%
2) 99 is $98 \%$ of what?

101
5) $40 \%$ of what is 17.3 ?
43.3
7) 115 is $84 \%$ of what?
136.9
9) What is $95 \%$ of 147 ?
139.7
11) What is $48 \%$ of 92 ?
44.2
13) $97 \%$ of what is 120 ?
123.7
15) $5 \%$ of what is 158 ?

3160
17) $5 \%$ of 95 is what?
4.8
19) 144 is $400 \%$ of what? 36
21) What percent of 147 is 141 ?
95.9\%
23) $4 \%$ of 61 is what?
2.4
25) $13 \%$ of what is 157 ?
1207.7
27) What percent of 112 is 66.8 ?
$59.6 \%$
29) $380 \%$ of 17.6 is what?
66.9
31) What percent of 130 is 94 ?
$72.3 \%$
33) 74 is $92 \%$ of what?
80.4
2) 93 is what percent of 158 ?
58.9\%
4) What is $112 \%$ of 9 ?
10.1
6) $77 \%$ of 25 is what?
19.3
8) What percent of 151 is 122 ?

$$
80.8 \%
$$

10) 11 is $42 \%$ of what?
26.2
11) 50 is what percent of 123 ?
$40.7 \%$
12) What is $64 \%$ of 112 ?
71.7
13) $14 \%$ of 9 is what?
1.26
14) $63 \%$ of 18 is what?
11.3
15) What percent of 61 is 109 ?
$178.7 \%$
16) 81 is what percent of 115 ?
$70.4 \%$
17) 18 is $85 \%$ of what?
21.2
18) $99 \%$ of 61 is what?
60.4
19) $19 \%$ of 60 is what?
11.4
20) 102 is what percent of 160 ? $63.8 \%$
21) 54 is what percent of 135 ?
$40 \%$
22) What percent of 54 is 120 ?
222.2\%
23) What percent of 16 is 119 ?
$743.8 \%$
24) $37 \%$ of what is 63 ?
170.3
25) What is $36 \%$ of 40 ?
14.4
26) What percent of 122 is 131 ?
107.4\%
27) $49 \%$ of what is 91 ?
185.7
28) 123 is what percent of 111 ?
$110.8 \%$
29) $2 \%$ of 77 is what?
1.54
30) $4 \%$ of what is 54.4 ?

1360
51) What percent of 147 is 57 ?
$38.8 \%$
53) 33 is $4 \%$ of what?

825
55) $76 \%$ of what is 141.8 ?
186.6
57) 52 is what percent of 54 ?
$96.3 \%$
59) $77 \%$ of what is 108 ?
140.3
61) $51 \%$ of what is 156.6 ?
307.1
63) $67 \%$ of what is 117 ?
174.6
65) $9 \%$ of what is 151 ?
1677.8
67) $2 \%$ of what is 7 ?

350
69) What percent of 122 is 94 ?

77\%
71) $58 \%$ of what is 86.3 ?
148.8
36) What percent of 106 is 47 ?
$44.3 \%$
38) $69 \%$ of what is 16 ?
23.2
40) What percent of 72.8 is 15 ?
20.6\%
42) $12 \%$ of 103 is what?
12.4
44) $4 \%$ of 134 is what?
5.4
46) What is $20 \%$ of 19.3 ?
3.9
48) 36 is $5 \%$ of what?

720
50) What percent of 106 is 50 ?
47.2\%
52) $55 \%$ of what is 131 ?
238.2
54) What is $38 \%$ of 80 ?
30.4
56) $74 \%$ of what is 29.8 ?
40.3
58) 141 is $19 \%$ of what?
742.1
60) What percent of 84.5 is 74 ?
87.6\%
62) 100 is what percent of 103.7 ?
96.4\%
64) 135 is what percent of 87 ?
$155.2 \%$
66) What percent of 102.4 is 5 ?
4.9\%
68) 69 is $40 \%$ of what?
172.5
70) $14 \%$ of what is 46 ?
328.6
72) What percent of 105 is 93 ?
88.6\%
73) $17 \%$ of 115 is what?
19.6
75) $130 \%$ of 85 is what?
110.5
77) $76 \%$ of 33.2 is what?
25.2
79) 30 is $42 \%$ of what?
71.4
74) $60 \%$ of 12 is what?
7.2
76) 104 is what percent of 45 ?
231.1\%
78) $36 \%$ of 36 is what? 13
80) $99 \%$ of 149.8 is what?
148.3

Find each percent change. State if it is an increase or a decrease.
81) From 21 to 66
$214.3 \%$ increase
83) From 38 to 17
$55.3 \%$ decrease
85) From 93 to 82
$11.8 \%$ decrease
87) From 35 to 48
$37.1 \%$ increase
89) From 87 to 31
$64.4 \%$ decrease
91) From 55 to 41
$25.5 \%$ decrease
93) From 22 to 26
$18.2 \%$ increase
95) From 93 to 33
$64.5 \%$ decrease
97) From 69 to 9
$87 \%$ decrease
99) From 97 to 49
$49.5 \%$ decrease
101) From 87 to 34
$60.9 \%$ decrease
103) From 68 to 94
38.2\% increase
105) From 48 to 45
$6.3 \%$ decrease
107) From 40 to 95.2
$138 \%$ increase
109) From 68 to 37
$45.6 \%$ decrease
82) From 74 to 21
$71.6 \%$ decrease
84) From 79 to 100
26.6\% increase
86) From 82 to 14
82.9\% decrease
88) From 66.4 to 36
$45.8 \%$ decrease
90) From 82 to 18
$78 \%$ decrease
92) From 78 to 63
$19.2 \%$ decrease
94) From 87 to 77
$11.5 \%$ decrease
96) From 12.9 to 28
$117.1 \%$ increase
98) From 10 to 3
$70 \%$ decrease
100) From 59 to 53
$10.2 \%$ decrease
102) From 91 to 67
26.4\% decrease
104) From 24.6 to 30
$22 \%$ increase
106) From 62 to 49
$21 \%$ decrease
108) From 19 to 22
$15.8 \%$ increase
110) From 50 to 87
$74 \%$ increase
111) From 79 to 39
50.6\% decrease
113) From 38 to 42
$10.5 \%$ increase
115) From 92.3 to 62
$32.8 \%$ decrease
117) From 86 to 24
$72.1 \%$ decrease
119) From 25 to 29
$16 \%$ increase
121) From 56 to 53
$5.4 \%$ decrease
123) From 81 to 73
9.9\% decrease
125) From 56 to 96
$71.4 \%$ increase
127) From 23 to 100
$334.8 \%$ increase
129) From 47 to 15
68.1\% decrease
131) From 73 to 7
$90.4 \%$ decrease
133) From 37 to 54
45.9\% increase
135) From 77 to 41
46.8\% decrease
137) From 25 to 33
$32 \%$ increase
139) From 58 to 86
48.3\% increase
112) From 52 to 29.8
$42.7 \%$ decrease
114) From 38 to 71.3 87.6\% increase
116) From 24 to 12 $50 \%$ decrease
118) From 95 to 10 $89.5 \%$ decrease
120) From 49 to 63
28.6\% increase
122) From 55 to 53
$3.6 \%$ decrease
124) From 51 to 37
$27.5 \%$ decrease
126) From 89 to 98
$10.1 \%$ increase
128) From 23 to 19
$17.4 \%$ decrease
130) From 87 to 5
94.3\% decrease
132) From 45 to 9
$80 \%$ decrease
134) From 54 to 85
57.4\% increase
136) From 52 to 50
$3.8 \%$ decrease
138) From 59 to 49
$16.9 \%$ decrease
140) From 89 to 75
$15.7 \%$ decrease

