

Student:

Teacher:

Date:

1 $5^2 =$ _____	2 Solve for x $14 + x = 31$ $x =$ _____	3 $-13 \cdot 4 =$ _____	4 $4^3 =$ _____
5 Solve for x $4x = 56$ $x =$ _____	6 $-3 \cdot -5 =$ _____	7 $-21 - -2 + 16 =$ _____	8 Solve for x $x \div 5 = 6$ $x =$ _____
9 Solve for x $2x = 94$ $x =$ _____	10 Solve for x $x - 32 = 5$ $x =$ _____	11 Convert to fraction $0.39 =$ _____	12 $-10 + -4 + -12 =$ _____
13 Convert to decimal $\frac{9}{10} =$ _____	14 Convert to fraction $0.7 =$ _____	15 Write fraction as mixed number $\frac{11}{4} =$ _____	16 $16^2 =$ _____
17 $-3 - -15 - -2 =$ _____	18 Solve for x $6 = 2x + 2$ $x =$ _____	19 Write fraction as mixed number $\frac{7}{6} =$ _____	20 Write the answer in lowest terms $\frac{1}{4} \cdot \frac{3}{10} =$ _____

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21 35% of 40= _____	22 Write the answer in lowest terms $\frac{7}{2} \cdot \frac{6}{11} =$ _____	23 Solve for x $90 = 9x + 9$ $x =$ _____	24 40% of 55= _____
25 $15^3 =$ _____	26 125% of 144= _____	27 $\begin{array}{r} 1.022 \\ \times 0.14 \\ \hline \end{array}$	28 $\begin{array}{r} 1.24 \\ \times 0.1 \\ \hline \end{array}$
29 110% of 160= _____	30 Convert to decimal $\frac{5}{8} =$ _____	31 Write the answer in lowest terms $\frac{4}{5} \div \frac{8}{9} =$ _____	32 $0.3 \overline{)0.21}$
33 Write the answer in lowest terms $\begin{array}{r} 3 \frac{5}{13} \\ + 2 \frac{2}{13} \\ \hline \end{array}$	34 $2.2 \overline{)2.42}$	35 Write the answer in lowest terms $\begin{array}{r} 6 \frac{3}{5} \\ - 5 \frac{1}{15} \\ \hline \end{array}$	36 Solve for x $\frac{x}{2} = 24$ $x =$ _____
37 Write the answer in lowest terms $5 \frac{1}{2} \cdot 4 \frac{2}{3} =$ _____	38 Write the answer in lowest terms $\frac{7}{9} \div \frac{3}{7} =$ _____	39 Write the answer in lowest terms $\begin{array}{r} 2 \frac{5}{7} \\ + 3 \frac{5}{14} \\ \hline \end{array}$	40 Write the answer in lowest terms $\begin{array}{r} 6 \frac{3}{6} \\ - 3 \frac{2}{6} \\ \hline \end{array}$

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Reminder: There is **no** partial credit when scoring. The answer must be correct **in its entirety** to obtain the correct score value. Note that the answer key provides the correct answers for each problem, but is not exhaustive. **NOTE:** Unless a mixed number is specifically requested, a reduced improper fraction may be considered the simplest form and scored as correct. For more information and examples of alternative correct answers, please refer to the Scoring section of the M-COMP manual.

Grade 8, Probe 22 Answer Key

Item No.	Answer	Correct	Incorrect	Item No.	Answer	Correct	Incorrect
1.	25	1	0	21.	14	3	0
2.	17	1	0	22.	$1\frac{10}{11}$	2	0
3.	-52	1	0	23.	9	2	0
4.	64	1	0	24.	22	3	0
5.	14	1	0	25.	3375	3	0
6.	15	1	0	26.	180	3	0
7.	-3	2	0	27.	0.14308	3	0
8.	30	1	0	28.	0.124	2	0
9.	47	1	0	29.	176	3	0
10.	37	1	0	30.	0.625	3	0
11.	$\frac{39}{100}$	1	0	31.	$\frac{9}{10}$	3	0
12.	-26	1	0	32.	0.7	3	0
13.	0.9	1	0	33.	$5\frac{7}{13}$	2	0
14.	$\frac{7}{10}$	1	0	34.	1.1	3	0
15.	$2\frac{3}{4}$	2	0	35.	$1\frac{8}{15}$	3	0
16.	256	2	0	36.	48	2	0
17.	14	2	0	37.	$25\frac{2}{3}$	3	0
18.	2	1	0	38.	$1\frac{22}{27}$	3	0
19.	$1\frac{1}{6}$	2	0	39.	$6\frac{1}{14}$	3	0
20.	$\frac{3}{40}$	2	0	40.	$3\frac{1}{6}$	2	0

Subtotal 1

Subtotal 2

TOTAL = Subtotal 1 + Subtotal 2