

Name _____ Date _____

Parent Signature _____ Date _____

Mathematics Big 20

Grade 6 Form A

P
E
M
D
AS

$2^2 \cdot 3 \cdot 5$

<p>1 Write 0.25 as a fraction and a percent.</p> <p>$\frac{25}{100} = \frac{1}{4} = 25\%$</p>	<p>2 $\frac{5}{8} + \frac{3}{4} + \frac{1}{2}$</p> <p>$\frac{5}{8} + \frac{6}{8} + \frac{4}{8} = \frac{15}{8}$</p>	<p>3 $3a^2 + 3b \cdot 3$</p> <p>$a=3 \quad b=2$</p> <p>$3 \cdot 3^2 + 3 \cdot 2 \cdot 3$</p> <p>$27 + 18 = 45$</p>	<p>4 Write the prime factorization of 60.</p> <p>$2 \cdot 2 \cdot 3 \cdot 5$</p>
<p>5 $\\$22.43 + f = \\40.00</p> <p>$f = \\$17.57$</p>	<p>6 25% of 64</p> <p>$\frac{25}{100} \times 64 = 16.00$</p>	<p>7 Find the GCF of 27 and 72.</p> <p>GCF = 9</p>	<p>8 $4.2 \text{ L} = \text{dL}$</p> <p>$42 \text{ dL}$</p>
<p>9 4 divided by $2\frac{1}{2}$</p> <p>$4 \div \frac{5}{2} = \frac{8}{5} = 1\frac{3}{5}$</p>	<p>10 $\frac{11}{22} - \frac{9}{22} = \frac{2}{22} = \frac{1}{11}$</p> <p>$z + \frac{9}{22} = \frac{11}{22}$</p> <p>$z = \frac{2}{22} = \frac{1}{11}$</p>	<p>11 Write 78% as a fraction and a decimal.</p> <p>$0.78 = \frac{78}{100} = \frac{39}{50}$</p>	<p>12 $9\frac{3}{7} - 5\frac{1}{2}$</p> <p>$9\frac{6}{14} - 5\frac{7}{14} = 4\frac{-1}{14} = 3\frac{13}{14}$</p>
<p>13 Find the LCM of 9 and 12.</p> <p>9: 9, 18, 27, 36</p> <p>12: 12, 24, 36</p> <p>LCM = 36</p>	<p>14 Simplify early</p> <p>$\frac{3}{7} \times \frac{14}{15}$</p> <p>$\frac{3 \times 2}{7 \times 5} = \frac{6}{35}$</p>	<p>15 $21 \text{ cm} = \text{m}$</p> <p>0.21 m</p>	<p>16 $180 = 6x$</p> <p>$30 = x$</p>
<p>17 $\frac{x}{4} = 3.4$</p> <p>$x = 12$</p>	<p>18 Find the surface area and volume of a cube with an edge of 4 cm.</p> <p>$SA = 6(4^2) = 96 \text{ cm}^2$</p> <p>$V = 4^3 = 64 \text{ cm}^3$</p>	<p>19 Use equivalent ratios or fractions</p> <p>$\frac{3}{14} = \frac{6}{x}$</p> <p>$3x = 84$</p> <p>$x = 28$</p>	<p>20 14 is what percent of 70?</p> <p>$\frac{14}{70} = \frac{2}{10} = \frac{20}{100} = 20\%$</p>

1	$\frac{1}{4}, 25\%$
2	$1\frac{7}{8}$
3	45
4	$2^2 \cdot 3 \cdot 5$
5	\$17.57
6	16
7	9
8	42 dL
9	$1\frac{3}{5}$
10	$\frac{1}{11}$
11	$0.78 = \frac{39}{50}$
12	$3\frac{13}{14}$
13	36
14	$\frac{2}{5}$
15	0.21 m
16	$x = 30$
17	$x = 12$
18	$96 \text{ cm}^2 = SA$ $64 \text{ cm}^3 = \text{Volume}$
19	$x = 28$
20	20%
%	

Cube:
 $S = 6s^2 \quad V = s^3$

$V = bh$
 $= 4 \cdot 4 \cdot 4$
 $= 16 \cdot 4$
 $= 64 \text{ cm}^3$

Prism:
 $S = 2lh + 2lw + 2wh$
 $V = lwh$

$\frac{84}{3} = \frac{3x}{3}$
 $28 = x$

Area
Parallelogram $A = bh$
Triangle $A = \frac{1}{2}bh$