

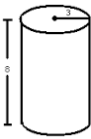
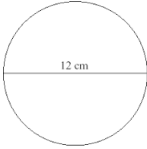


Paradigm 8th Grade Math Correlation to Utah Core Standards

Concept Name	Example	Utah Core Standard
Basic Operations		
Addition, subtraction, multiplication, division	\$1.45 + \$6 + 8¢ \$20 - \$5.25 \$7.03 X 15 4825 ÷ 12	
Place value	Show how to write this number using digits: one billion, fifty-seven thousand, thirty-three and twenty-eight thousandths	
Prime factorization	Write the prime factorization for 420	
Mean, median, mode and range	15, 18, 17, 20, 18 Find the mean, median, mode and range.	
Fractions - idea, parts, pictures, equivalent	Fred made 3/4 of his shots playing basketball. If he made 18 baskets how many shots did he throw?	
Fractions: GCF, LCM, mixed numbers	$6\frac{1}{2} \div (5 - 2\frac{3}{4})$	
Decimals: idea, place value	2.4 ÷ 0.06 2.4 × 0.06 2.4 + 0.06 2.4 - 0.06	
Decimals +, -, x, ÷	0.7(3.2 ÷ 0.8) + 1.3	
Percent	30 is what percent of 50? and 15% of what number is 75?	
Decimal/fraction/% conversion	Write $5\frac{3}{8}$ as a decimal number Write 0.008 as a reduced fraction Write 0.125 as a percent	
Fractions +, -, x, ÷	Simplify: $2\frac{1}{2} - \frac{1}{5} \div \frac{2}{3}$	
Scientific notation	$\frac{3.8 \times 10^{-3}}{2 \times 10^{-5}}$	8.EE.3 8.EE.4
Proportion & Probability		
Probability	A bag contains green marbles and blue marbles at a ratio of 2 to 1. What is the probability of drawing a blue marble?	
Ratios, proportions, & unit rate		8.F.1 8.F.4
Variable Manipulation		
Order of operations	$2\frac{2}{5} \left(2\frac{1}{4} - \frac{1}{6}\right) - \sqrt[3]{27}$	8.EE.1 8.EE.2
Missing numbers in +, -, X, ÷	$\frac{P}{4} = 9$	
Measurement/unit conversions	264 hours is how many days?	
Data Collection, Representation & Interpretation		8.SP.1 8.SP.2 8.SP.3 8.SP.4

2 step equations	Solve for x: $-0.5x + 0.7 = 6.2$	8.EE.7
System of equations	$3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6	8.EE.8
Powers and roots	Simplify: $\frac{9x^2y^4z}{3xy^2z}$	
Algebraic terms	Solve for x: $1\frac{3}{4}x = 6 + x$	
Integers/signed equations	Simplify: $\frac{-144}{6}$	
Plane Geometry		
Angles, lines, triangles	Lines p and q are parallel. Angle 1 is 110° find the measure of all the other angles. 	8.G.5
Pythagorean theorem	 <small>Note: The figure is not drawn to scale.</small> What is the length of the hypotenuse?	8.G.6 8.G.7 8.G.8
Area and perimeter of rectangles	The area of a square is 25 in^2 what is the perimeter?	
Surface area & volume	Find the volume and surface area of the cylinder 	8.G.9
Circles: circumference/area	Find the circumference and area of the circle 	
Coordinate Geometry		
Graphs & function notation	Graph the inequality on a number line $X \geq -3$	8.F.1 8.F.2 8.F.4 8.F.5
Parallel, perpendicular, angles, line segments		8.G.1
Slope and coordinating plane	Re-write $3x + y - 2 = 0$ in slope-intercept form and graph the equation	8.EE.5 8.EE.6 8.F.3 8.SP.3
Symmetry, similar, reflections, rotations, translations,		8.G.2 8.G.3 8.G.4