



Algebra with Exponents - Binomial over Monomial and Constant



1 Simplify and solve for m

$$3^{\left(\frac{5m+63}{7m}\right)} = 9$$

| | | | |
|---------|---------|---------|---------|
| A | B | C | D |
| $m = 8$ | $m = 7$ | $m = 6$ | $m = 9$ |

2 Simplify and solve for x

$$7^{\left(\frac{5x+18}{2x}\right)} = 49$$

| | | | |
|---|-----------|---|-----------|
| A | $x = -19$ | B | $x = -18$ |
| C | $x = -17$ | D | $x = -16$ |

3 Simplify and solve for n

$$8^{\left(\frac{7n+27}{5n}\right)} = 64$$

| | | | |
|----------|---------|---------|----------|
| A | B | C | D |
| $n = 10$ | $n = 8$ | $n = 9$ | $n = 11$ |

4 Simplify and solve for m

$$6^{\left(\frac{4m+56}{6m}\right)} = 216$$

| | | | |
|---------|---------|---------|---------|
| A | B | C | D |
| $m = 4$ | $m = 5$ | $m = 3$ | $m = 6$ |

5 Simplify and solve for z

$$3^{\left(\frac{9z+20}{4z}\right)} = 9$$

| | | | |
|-----------|-----------|-----------|-----------|
| A | B | C | D |
| $z = -19$ | $z = -18$ | $z = -21$ | $z = -20$ |

6 Simplify and solve for z

$$6^{\left(\frac{9z+18}{4z}\right)} = 216$$

| | | | |
|---------|---------|---------|---------|
| A | B | C | D |
| $z = 7$ | $z = 6$ | $z = 8$ | $z = 5$ |

7 Simplify and solve for x

$$3^{\left(\frac{2x+36}{5x}\right)} = 81$$

| | | | |
|---------|---------|---------|---------|
| A | B | C | D |
| $x = 2$ | $x = 4$ | $x = 3$ | $x = 1$ |

8 Simplify and solve for z

$$4^{\left(\frac{7z+36}{4z}\right)} = 16$$

| | | | |
|----------|----------|----------|----------|
| A | B | C | D |
| $z = 37$ | $z = 35$ | $z = 38$ | $z = 36$ |