

### ACTION

Revision Material



<http://corbettmaths.com/contents/>  
Video 173-175

### RESPONSE

Evaluate

Fluency



1)  $3^{-2}$

5)  $121^{\frac{1}{2}}$

9)  $49^{-0.5}$

2)  $5^{-3}$

6)  $64^{\frac{1}{3}}$

10)  $1000^{-\frac{2}{3}}$

3)  $10^{-4}$

7)  $81^{0.25}$

11)  $64^{-\frac{5}{6}}$

4)  $2^{-5}$

8)  $27^{\frac{2}{3}}$

12)  $\left(\frac{9}{16}\right)^{-1.5}$

Work out

1)  $36^{-0.5} \times 27^{\frac{1}{3}}$

2)  $16^{\frac{3}{2}} \div 8^{\frac{5}{3}}$

3)  $\frac{9^{\frac{3}{2}} \times 81^{-\frac{1}{4}}}{27^{-\frac{2}{3}}}$

Reasoning



Complete the expressions to make them all equivalent

$$\frac{2}{2^{\square} \times 3^{\square}}$$

$$\square^{-\frac{1}{2}} \times \square^{\frac{1}{2}}$$

$$2^{-3} \times 3^2$$

$$8 \times \square^{-2} \times 9^{\square} \times 2^{\square}$$

$$\frac{\square^{-\frac{1}{2}} \times 3^{\frac{1}{2}}}{2^{\square} \times \square^{\square}}$$

Problem Solving



Write the following in ascending order, where  $a > 1$

$a^{-1}$     $a^0$     $a^2$     $a^{-2}$     $a^{\frac{1}{2}}$

How does the order change if, instead,  $0 < a < 1$



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#### Fluency



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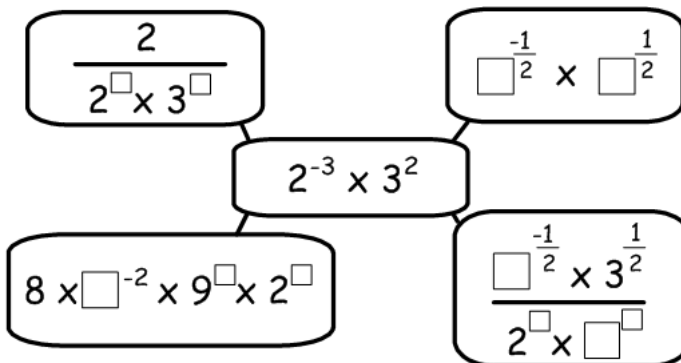
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