



Real Numbers

- 1 Figure out the answer by using the correct order of operations

$$\frac{\sqrt{9+72}+4^2}{4+1}$$

A	1	B	5	C	12
D	9	E	25	F	3

- 2 Figure out the answer by using the correct order of operations

$$(26 + 2^2) \div 6 + 7 \times 4 = ?$$

A	23	B	10	C	24
D	33	E	40	F	36

- 3 Figure out the answer by using the correct order of operations

$$4^2 + 15 \div 5 + 7 \times 6 = ?$$

A	62	B	61	C	64
D	55	E	56	F	7

- 4 Which number is between 4 and 5?

A	$\sqrt{18}$	B	$\sqrt{7}$
C	π		

- 5 Which number is between -4 and -3?

A	$-\sqrt[3]{28}$	B	$-\frac{3}{2}\pi$
C	$-\sqrt[3]{13}$		

- 6 Approximate the value of 'b' in this equation

$$144 + b^2 = 289$$

A	$b = 7$	B	$b = 12$
C	$b = 16.6$	D	$b = 204$
E	$b = 7.2$	F	$b = 10$

- 7 Classify this number as natural, whole, integer, rational or irrational. Pick the narrowest definition that fits.

$$\frac{21}{7}$$

A	Natural Number
B	Irrational Number

- 8 Select the narrowest description that matches this number type

$$\frac{8}{4}$$

A	A real number that cannot be expressed as a simple fraction (e.g., $\sqrt{2}$, π).
B	A positive integer (1, 2, 3, ...).



Real Numbers

- 9** Compare the two numbers. Is the first less than, equal to, or greater than the second?

$$\frac{5}{3} \quad \bigcirc \quad -2$$

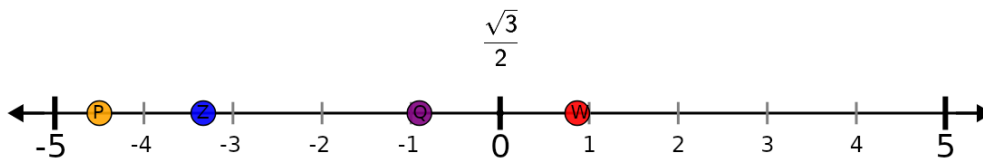
A B C

- 10** Put these numbers in order from smallest to largest.

$$1.\overline{6}, \quad -\frac{3}{2}, \quad -\frac{9}{5}$$

A $-\frac{9}{5}, \quad -\frac{3}{2}, \quad 1.\overline{6}$ B $1.\overline{6}, \quad -\frac{3}{2}, \quad -\frac{9}{5}$ C $-\frac{3}{2}, \quad 1.\overline{6}, \quad -\frac{9}{5}$ D $-\frac{3}{2}, \quad -\frac{9}{5}, \quad 1.\overline{6}$

- 11** Which dot is at this value?

A B C D

- 12** Compare the two numbers. Is the first less than, equal to, or greater than the second?

$$-3\sqrt[3]{2} \quad \bigcirc \quad -\sqrt{11}$$

A B C

- 13** Approximate the value of 'c' in this equation

$$a^2 + b^2 = c^2$$

$$a = 9$$

$$b = 5$$

$$c = ?$$

A $c = 10.3$ B $c = 6.9$ C $c = 7.8$ D $c = 8.6$ E $c = 45$ F $c = 7.5$

- 14** Approximate the value of 'b' in this equation

$$3^2 + b^2 = 7^2$$

A $b = 7$ B $b = 6.8$ C $b = 6.3$ D $b = 3.2$ E $b = 3.3$ F $b = 4.3$

- 15** Approximate the value of 'a' in this equation

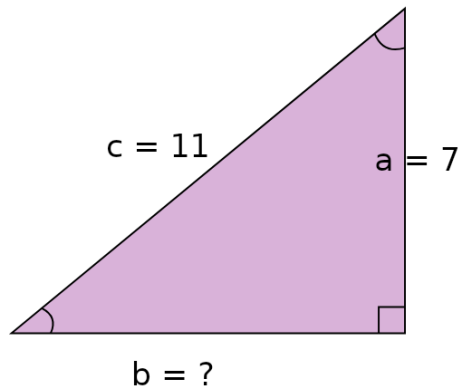
$$a^2 + 100 = 144$$

A $a = 22$ B $a = 4.6$ C $a = 3.6$ D $a = 8.6$ E $a = 6.6$ F $a = 120$



Real Numbers

- 16** Find the length of the missing side as a decimal value based on the Pythagorean theorem: $a^2 + b^2 = c^2$



A $b=8.49$	B $b=77$	C $b=5.94$
D $b=4.24$	E $b=6.79$	F $b=7.49$

- 17** Figure out the answer by using the correct order of operations

$$\sqrt{14-5} + 2^2$$

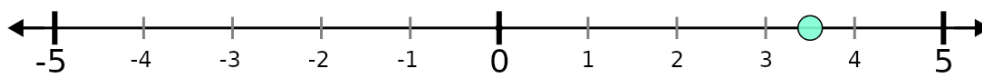
A 7	B 9	C 4
D 2	E 10	F 12

- 18** Figure out the answer by using the correct order of operations

$$|8-13| + \sqrt{45+19} - 2^2$$

A 9	B 7	C 3
D 10	E 15	F 14

- 19** What number is this dot at?



A $\frac{5e}{3}$
B $3\frac{1}{2}$
C $-\frac{2e}{3}$

- 20** Which number is between -3 and -2?

A $-\sqrt[3]{28}$	B $-\sqrt[3]{3}$
C $-\sqrt[3]{20}$	

- 21** Classify this number as natural, whole, integer, rational or irrational. Pick the narrowest definition that fits.

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A Irrational Number
B Natural Number