

Questions to be Spiraled

19Mark for Review

$$57x^2 + (57b + a)x + ab = 0$$

In the given equation, a and b are positive constants. The product of the solutions to the given equation is kab , where k is a constant. What is the value of k ?

A1/57

B1/19

C1

D57

Student-produced response directions

- If you find **more than one correct answer**, enter only one answer.
- You can enter up to 5 characters for a **positive** answer and up to 6 characters (including the negative sign) for a **negative** answer.
- If your answer is a **fraction** that doesn't fit in the provided space, enter the decimal equivalent.
- If your answer is a **decimal** that doesn't fit in the provided space, enter it by truncating or rounding at the fourth digit.
- If your answer is a **mixed number** (such as $3\frac{1}{2}$), enter it as an improper fraction (7/2) or its decimal equivalent (3.5).
- Don't enter **symbols** such as a percent sign, comma, or dollar sign.

Examples

11Mark for Review

$$2(kx - n) = -\frac{28}{15}x - \frac{36}{19}$$

In the given equation, k and n are constants and $n > 1$. The equation has no solution. What is the value of k ?

Answer Preview:

In 1937, Chinese American screen actor Anna May Wong, who had portrayed numerous villains and secondary characters but never a heroine, finally got a starring role in Paramount Pictures' *Daughter of Shanghai*, a film that _____ "expanded the range of possibilities for Asian images on screen."

22Mark for Review

Which choice completes the text so that it conforms to the conventions of Standard English?

Acritic, Stina Chyn, claims

Bcritic, Stina Chyn, claims,

Ccritic Stina Chyn claims

Dcritic Stina Chyn, claims,

20.

$$-64x^2 + cdx - 3d(64c + d) = 0$$

In the given equation, c and d are integer constants. The sum of solutions of the given

A) 64

B) 1/64

C) 192

D) -1/3

Solution: B

18.

$$2x^2 + (16j + 5k)x - 14jk = 0$$

In the given equation, j and k are constants. The product of solutions of the given equation is

A) 16

B) 5

C) -14

D) -7

Solution: D

19.

$$8x^2 - (4a + 4b)x + 156(a + b) = 0$$

In the given equation, a and b are integer constants. The sum of solutions of the given equation is $(a+b)q$, where q is a constant. What is the value of q ?

A) $1/4$

B) 2

C) $1/2$

D) 4

Solution: C

18.

$$204x^2 + (12c + 28d)x + 408cd = 0$$

In the given equation, c and d are constants. The product of solutions of the of the given

A) 2

B) 4

C) 12

D) $1/204$

Solution: A

10.

$$4(ax - 7b) = \frac{12}{13}x - \frac{14}{17}$$

In the given equation, a and b are constants and $b > 1$. The equation has no solutions. What is the value of a?

Solution: 3/13 or 0.230 or

11.

$$8(jx - 7k) = \frac{17}{10}x - 56$$

In the given equation, j and k are constants and $k > 1$. The equation has

Solution: 17/80 or 0.213

12.

$$\frac{3}{2}(cx - 7d) = \frac{18}{11}x - \frac{12}{11}$$

In the given equation, c and d are constants and $d > 1$. The equation has

Solution: 12/11 or 1.091

11.

$$5(qx - r) = \frac{43}{17}x - \frac{26}{21}$$

In the given equation, q and r are constants and $r > 1$. The equation has

Solution: 43/85 or 0.505 or

21.

_____ consistently and publicly expressed the immediacy of climate change. She believes that there is still time to reverse the effect of centuries of fossil fuel emissions, stating that “the health of our planet requires urgent and collective action.”

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) Renowned, environmental scientist, Dr. Elena Millnamow, has
- B) Renowned environmental scientist, Dr. Elena Millnamow, has
- C) Renowned environmental scientist Dr. Elena Millnamow has
- D) Renowned environmental scientist Dr. Elena Millnamow, has

Solution: C

20.

After the recent Boston Pops performance of Vivaldi’s opus “The Four _____ in baroque music, wrote an op-ed to Gramophone, a classical music magazine, commending the interpretation. He wrote that he had never before seen such a faithful performance to the time in which the piece was written: “each note tells a unique story of its era.”

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) Seasons” Maestro Giuseppe Ferrara, an expert
- B) Seasons,” Maestro Giuseppe Ferrara an expert
- C) Seasons,” Maestro Giuseppe Ferrara, an expert
- D) Seasons” Maestro Giuseppe Ferrara an expert

Solution: C

22.

In a recent review in the magazine "Film Today," _____ often focuses on international cinema, lauded the 2018 Chinese film "Long Day's Journey into Night." Mitchell praised the film's director, Bi Gan, writing that his "storytelling has no borders or boundaries."

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) film critic, Laura Mitchell, who
- B) film critic Laura Mitchell, who
- C) film critic Laura Mitchell who
- D) film, critic, Laura Mitchell, who

21.

The _____ extensively through Asia, working in kitchens from Cambodia to Bangladesh to Qatar. In his new memoir, Bensti-Enchill connects his travels with his childhood in Ghana, concluding that "culinary art is a universal language that brings people together."

Which choice completes the text so that it conforms to the conventions of Standard English?

- A) innovative chef Nii Ato Bentsi-Enchill has traveled
- B) innovative, chef, Nii Ato Bentsi-Enchill, has traveled
- C) innovative chef Nii Ato Bentsi-Enchill, has traveled
- D) innovative, chef Nii Ato Bentsi-Enchill, has traveled