

NAME: _____

1. 060305b, P.I. A2.N.5

Which expression is equivalent to $\frac{4}{3+\sqrt{2}}$?

- [A] $\frac{12-4\sqrt{2}}{7}$ [B] $\frac{12-4\sqrt{2}}{11}$
[C] $\frac{12+4\sqrt{2}}{7}$ [D] $\frac{12+4\sqrt{2}}{11}$

2. 010902b, P.I. A2.N.5

The expression $\frac{5}{3+\sqrt{2}}$ is equivalent to

- [A] $\frac{5\sqrt{2}-15}{5}$ [B] $15-5\sqrt{2}$
[C] $\frac{\sqrt{2}-15}{3}$ [D] $\frac{15-5\sqrt{2}}{7}$

3. 080606b, P.I. A2.N.5

The expression $\frac{12}{3+\sqrt{3}}$ is equivalent to

- [A] $4-2\sqrt{3}$ [B] $2+\sqrt{3}$
[C] $12-\sqrt{3}$ [D] $6-2\sqrt{3}$

4. 080716b, P.I. A2.N.5

The expression $\frac{2}{1-\sqrt{3}}$ is equivalent to

- [A] $1+\sqrt{3}$ [B] $-1-\sqrt{3}$
[C] $1-\sqrt{3}$ [D] $-1+\sqrt{3}$

5. 010405b, P.I. A2.N.5

The expression $\frac{7}{2-\sqrt{3}}$ is equivalent to

- [A] $\frac{14+\sqrt{3}}{7}$ [B] $\frac{2+\sqrt{3}}{7}$
[C] $14-7\sqrt{3}$ [D] $14+7\sqrt{3}$

6. 010516b, P.I. A2.N.5

The expression $\frac{7}{3-\sqrt{2}}$ is equivalent to

- [A] $\frac{21+\sqrt{2}}{7}$ [B] $3+\sqrt{2}$
[C] $\frac{3+\sqrt{2}}{7}$ [D] $3-\sqrt{2}$

7. 080506b, P.I. A2.N.5

The expression $\frac{1}{5-\sqrt{13}}$ is equivalent to

- [A] $\frac{5+\sqrt{13}}{-8}$ [B] $\frac{5+\sqrt{13}}{8}$
[C] $\frac{5+\sqrt{13}}{-12}$ [D] $\frac{5+\sqrt{13}}{12}$

8. 010708b, P.I. A2.N.5

The expression $\frac{4}{5-\sqrt{13}}$ is equivalent to

- [A] $\frac{5-\sqrt{13}}{3}$ [B] $\frac{5+\sqrt{13}}{3}$
[C] $\frac{2(5-\sqrt{13})}{19}$ [D] $\frac{2(5+\sqrt{13})}{19}$

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9. 080420b, P.I. A2.N.5

The expression $\frac{11}{\sqrt{3}-5}$ is equivalent to

- [A] $\frac{\sqrt{3}+5}{2}$ [B] $\frac{-\sqrt{3}+5}{2}$
[C] $\frac{-\sqrt{3}-5}{2}$ [D] $\frac{\sqrt{3}-5}{2}$

10. 010613b, P.I. A2.N.5

The expression $\frac{5}{\sqrt{5}-1}$ is equivalent to

- [A] $\frac{5}{4}$ [B] $\frac{5\sqrt{5}-5}{6}$
[C] $\frac{5\sqrt{5}-5}{4}$ [D] $\frac{5\sqrt{5}+5}{4}$

11. 060709b, P.I. A2.N.5

The fraction $\frac{3}{\sqrt{6}-1}$ is equivalent to

- [A] $3\sqrt{6}+3$ [B] $3\sqrt{6}-3$
[C] $\frac{3\sqrt{6}-3}{5}$ [D] $\frac{3\sqrt{6}+3}{5}$

12. 080307b, P.I. A2.N.5

Which expression is equal to $\frac{2+\sqrt{3}}{2-\sqrt{3}}$?

- [A] $7+4\sqrt{3}$ [B] $\frac{7+4\sqrt{3}}{7}$
[C] $1-4\sqrt{3}$ [D] $\frac{1-4\sqrt{3}}{7}$

13. 060905b, P.I. A2.N.5

The expression $\frac{5+\sqrt{7}}{5-\sqrt{7}}$ is equivalent to

- [A] $\frac{16+5\sqrt{7}}{9}$ [B] $\frac{16-5\sqrt{7}}{9}$
[C] $\frac{16-5\sqrt{7}}{16}$ [D] $\frac{16+5\sqrt{7}}{16}$

14. fall9906b, P.I. A2.N.5

Which expression is equivalent to $\frac{\sqrt{7}+\sqrt{2}}{\sqrt{7}-\sqrt{2}}$?

- [A] $\frac{11+\sqrt{2}}{14}$ [B] -1
[C] $\frac{9}{5}$ [D] $\frac{9+2\sqrt{14}}{5}$

15. 080210b, P.I. A2.N.5

Which expression represents the sum of

$$\frac{1}{\sqrt{3}} + \frac{1}{\sqrt{2}}?$$

- [A] $\frac{2\sqrt{3}+3\sqrt{2}}{6}$ [B] $\frac{2}{\sqrt{5}}$
[C] $\frac{\sqrt{3}+\sqrt{2}}{3}$ [D] $\frac{\sqrt{3}+\sqrt{2}}{2}$

- [1] A
- [2] D
- [3] D
- [4] B
- [5] D
- [6] B
- [7] D
- [8] B
- [9] C
- [10] D
- [11] D
- [12] A
- [13] A
- [14] D
- [15] A