Math worksheet on *'Sums - Series of Integers M to N - Addition to Equation (Level 1)'*. Part of a broader unit on *'Patterns and Sums - Advanced'*

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1 What equation would give you the sum of this set of integers?

6 + 7 + ... + 14 + 15

a $\frac{15(15+1)}{2} - \frac{(6-1)6}{2}$

b $\frac{16(16+1)}{2} - \frac{(6-1)6}{2}$

c $\frac{2}{15(15+1)}$

d $\frac{14(14+1)}{2} - \frac{(6-1)6}{2}$

e $\frac{15(15+1)}{2}$

2 What equation would give you the sum of this set of integers?

11 + 12 + ... + 16 + 17

a $\frac{17(17+1)}{2}$

b $\frac{17(17+1)}{2} - \frac{(11-1)11}{2}$

c $\frac{17(17+1)}{2} - \frac{(12-1)12}{2}$

d $\frac{17(17+1)}{2} - \frac{(10-1)10}{2}$

e $\frac{18(18+1)}{2} - \frac{(11-1)11}{2}$

3 What equation would give you the sum of this set of integers?

13 + 14 + ... + 18 + 19

a $\frac{19(19+1)}{2} - \frac{(13-1)13}{2}$

b $\frac{2}{19(19+1)}$

c $\frac{20(20+1)}{2} - \frac{(13-1)13}{2}$

d $\frac{18(18+1)}{2} - \frac{(13-1)13}{2}$

4 What equation would give you the sum of this set of integers?

12 + 13 + ... + 20 + 21

a $\frac{22(22+1)}{2} - \frac{(12-1)12}{2}$

b $\frac{21(21+1)}{2} - \frac{(13-1)13}{2}$

c $\frac{21(21+1)}{2}$

d $\frac{21(21+1)}{2} - \frac{(12-1)12}{2}$

5 What equation would give you the sum of this set of integers?

3 + 4 + ... + 10 + 11

a $\frac{2}{11(11+1)}$

b $\frac{11(11+1)}{2} - \frac{(3-1)3}{2}$

c $\frac{11(11+1)}{2} - \frac{(4-1)4}{2}$

d $\frac{11(11+1)}{2}$

6 What equation would give you the sum of this set of integers?

9 + 10 + ... + 16 + 17

a $\frac{18(18+1)}{2} - \frac{(9-1)9}{2}$

b $\frac{17(17+1)}{2}$

c $\frac{17(17+1)}{2} - \frac{(8-1)8}{2}$

d $\frac{17(17+1)}{2} - \frac{(9-1)9}{2}$

7 What equation would give you the sum of this set of integers?

14 + 15 + ... + 22 + 23

a $\frac{2}{23(23+1)}$

b $\frac{22(22+1)}{2} - \frac{(14-1)14}{2}$

c $\frac{24(24+1)}{2} - \frac{(14-1)14}{2}$

d $\frac{23(23+1)}{2} - \frac{(14-1)14}{2}$