

2018 8.1

Score: \_\_\_\_\_

1. Evaluate  $2 + 3 * 4 - 1$

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2. Evaluate  $4 * 1 - 3 + 2 * 1$

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3. What does this AST evaluate to?

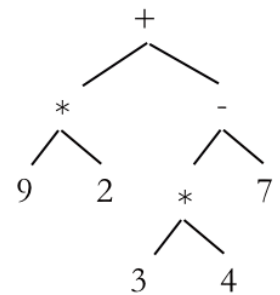
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4. What does this AST evaluate to?

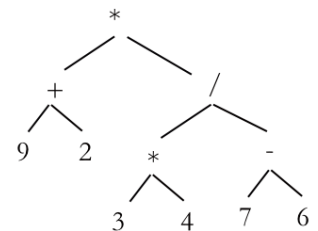
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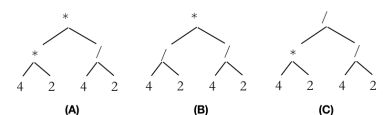
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5. Which of the following ASTs does **not** evaluate to 4?

- ☐ A A
- ☐ B B
- ☐ C C



6. Evaluate  $(+ (/ 4 (* 3 2)) 21)$ . Note that fractions are given in this form:  $2/3$ .

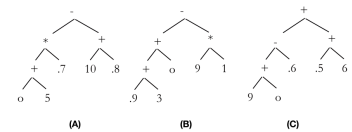
- (A)  $21 \frac{2}{3}$
- (B)  $20 \frac{1}{3}$
- (C)  $18 \frac{1}{3}$
- (D) 21
- (E)  $20 \frac{2}{3}$
- (F) 18

7.  $(* (+ 12 (* 3 (/ 2 1))) 2)$ . Note that fractions are given in this form:  $2/3$ .

- (A) 23
- (B)  $36 \frac{1}{3}$
- (C) 42
- (D)  $21 \frac{2}{3}$
- (E) 36
- (F) 21

8. Which AST evaluates to  $14.9 + o$ ?

- (A) A
- (B) B
- (C) C



9. Which is the correct AST for  $(* (+ 12 (* 3 (/ 2 1))) 2)$ ?

- (A) A
- (B) B
- (C) C

