Answers only. Don't simplify or include a constant. ${\bf 6}$ or more exactly right for full credit.

1. Compute $\int \left(4\sin(4v) + \frac{2}{v^2} + \frac{5}{\sqrt{1-v^2}}\right) dv$.

2. Compute $\int_2^e \left(\frac{9w^3-5}{w}\right) dw$.

3. Compute $\int \sin(3y)e^{6\cos(3y)} dy$.

4. Compute $\int_1^4 \frac{v}{5v^2 - 4} \, dv.$

5. Compute $\int 6 \arcsin(4t) dt$.

6. Compute
$$\int \frac{-6y+2}{y^2-2y} \, dy.$$

7. Compute
$$\int \frac{18u+6}{u^2-4u+29} du$$
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